

Appendix 4.2-A

MassGIS Generalized Land Use Data

The MassGIS dataset used to identify developable land is available at <http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/datalayers/lus2005.html>. MassDOT considered land currently identified as agricultural, forest, mining, recreation, or undeveloped as potentially developable land area. For uncluttered presentation in the accompanying figures, MassDOT generalized MassGIS's land use categories as indicated in the following table.

Generalized Land Use Category	MassGIS Land Use Categories
<i>Agriculture</i>	<i>Orchard (part of #21), Pasture, Nursery (part of #21), Cropland</i>
<i>Cemetery</i>	<i>Cemetery</i>
<i>Commercial</i>	<i>Commercial</i>
<i>Forest</i>	<i>Forest</i>
<i>Industrial</i>	<i>Industrial, junkyards</i>
<i>Institutional</i>	<i>Urban public/institutional</i>
<i>Mining</i>	<i>Mining</i>
<i>Open Water</i>	<i>Water</i>
<i>Recreation</i>	<i>Participation Recreation, Spectator Recreation, Water Based Recreation, Marina (part of #9)</i>
<i>Residential</i>	<i>Low Density Residential, Very low density > 1 acre lots, Medium Density Residential, Multi-Unit Residential</i>
<i>Transportation/Utilities</i>	<i>Waste Disposal, Powerlines (part of #6)</i>
<i>Undeveloped</i>	<i>Coastal Shore/Saltwater sandy beach (part of #9; no longer used) (from DEP), Forested wetland (part of #3; no longer used) (from DEP), Salt Wetland, Urban Open, Non-forested Wetland (from DEP), Open Land</i>

Appendix 4.4-A

CTPS South Coast Rail Environmental Justice Study

MEMORANDUM**To: South Coast Rail Project Interested Parties****September 4, 2009****From: Ben Dowling, Esq.****Re: South Coast Rail Environmental Justice Study****SUMMARY**

This memo summarizes the results of the environmental justice analysis—an examination of the geographic distribution of benefits and burdens—conducted for the South Coast Rail project. The analysis was conducted using the regional travel demand model and readily available geographic and spatial information. The analysis examines how South Coast Rail proposed build alternatives affect the travel accessibility and mobility of environmental justice communities in Taunton, Fall River and New Bedford. The analysis was based on the future year (2030) travel forecasting done in connection with the South Coast Rail project. This analysis did not examine the effects of improved interconnectivity between the South Coast Rail study area and Providence, although there may be some environmental justice benefits associated with such improved connectivity.

Definition of Environmental Justice Communities

The State Executive Office of Environmental Affairs' (EOEA) definition of environmental justice populations was used in this study. The EOEA considers a population to be an environmental justice population if a Census block group's median annual household income is at or below 65 percent of the statewide median income for Massachusetts, or if twenty-five percent of its residents are members of minorities; or if twenty-five percent of its residents are foreign born, or if twenty-five percent of its residents lack English proficiency.

The regional travel demand forecasting model's transportation analysis zones (TAZ) in the South Coast area, the geographic base for the environmental justice analysis, do not split block groups. In the Boston area there are some misalignments between TAZs and Census block groups, however this did not significantly affect the environmental justice analysis results. For a detailed discussion of the regional travel demand forecasting model please refer to the August 2009 CTPS memorandum titled "Methodology and Assumptions of Central Transportation Planning Staff Regional Travel Demand Modeling."

Modeling Assumptions

It is important to note that the results presented in this memo—like the results of alternatives analyses in many different contexts—are relative. In the case of this environmental justice analysis, the results are relative to a future year no-build/Transportation Systems Management scenario in which the headways of the private bus lines that currently service the South Coast region were improved over their current year counterparts. In transportation planning, it is standard practice to assume that in the absence of future build project implementation, existing transit services, in a future year no-build, should be incrementally improved, to meet the increased demand due to "background" population growth. Such a future year transit network is called a Transportation System Management (TSM) scenario. In this analysis, the private bus headway improvements were included in the future year no-build/TSM because, in the absence of a build alternative implementation, such improvements are expected in order to accommodate regional population growth and concomitant increases in transit demand, over the project study horizon.

In this environmental justice analysis, if a no-build/TSM scenario was not used as the future year no-build, and a true no-build was used in its place, the environmental justice results would tend to improve because, again, the analysis results are relative to a no-build. Using a true no-build instead of a no-build/TSM would create more distance between the build alternatives and the scenario to which they are compared.

It is also important to note that environmental justice analysis results are, of course, influenced by specific aspects of the build alternatives. For a complete description of the build alternatives please refer to the Draft Environmental Impact Report.

ANALYSIS

Accessibility to Jobs

This statistic measures the degree to which a build alternative provides greater access to employment as compared to the no-build/TSM alternative. It measures the change, for environmental and non-environmental justice zones, in the number of basic, retail and service jobs that are within ninety minutes transit time of environmental justice and non-environmental justice zones in Taunton, New Bedford and Fall River. For this analysis the number of jobs available remain constant as between the no-build/TSM and the build alternatives. The analysis accounts for in-vehicle as well as out of vehicle transit travel times. The transit access percentages in Table 1 (below) represent the change between the no-build/TSM and listed build alternatives.

Table 1: Accessibility to Basic, Retail and Service Jobs—Change From No-Build/TSM to Build

	TAUNTON BASIC EMPLOYMENT		TAUNTON RETAIL EMPLOYMENT		TAUNTON SERVICE EMPLOYMENT	
	TRANSIT ACCESS		TRANSIT ACCESS		TRANSIT ACCESS	
	EJ	NonEJ	EJ	NonEJ	EJ	NonEJ
Stoughton Local Electric	61%	41%	69%	48%	223%	84%
Stoughton Local Diesel	46%	35%	51%	39%	135%	63%
Attleboro Local Electric	70%	37%	80%	43%	280%	82%
Attleboro Local Diesel	53%	32%	59%	35%	169%	61%
Stoughton Local Electric--Whittenton	39%	26%	39%	25%	122%	27%
Stoughton Local Diesel--Whittenton	29%	22%	29%	20%	74%	20%
Rapid Bus	-3%	0%	-2%	0%	0%	0%

	FALL RIVER BASIC EMPLOYMENT		FALL RIVER RETAIL EMPLOYMENT		FALL RIVER SERVICE EMPLOYMENT	
	TRANSIT ACCESS		TRANSIT ACCESS		TRANSIT ACCESS	
	EJ	NonEJ	EJ	NonEJ	EJ	NonEJ
Stoughton Local Electric	147%	84%	137%	82%	278%	117%
Stoughton Local Diesel	125%	75%	112%	75%	216%	108%
Attleboro Local Electric	127%	69%	116%	70%	257%	108%
Attleboro Local Diesel	108%	62%	94%	63%	200%	99%
Stoughton Local Electric--Whittenton	117%	69%	103%	68%	199%	104%
Stoughton Local Diesel--Whittenton	99%	62%	84%	62%	155%	96%
Rapid Bus	14%	-1%	27%	7%	100%	50%

	NEW BEDFORD BASIC EMPLOYMENT		NEW BEDFORD RETAIL EMPLOYMENT		NEW BEDFORD SERVICE EMPLOYMENT	
	TRANSIT ACCESS		TRANSIT ACCESS		TRANSIT ACCESS	
	EJ	NonEJ	EJ	NonEJ	EJ	NonEJ
Stoughton Local Electric	11%	4%	13%	6%	39%	5%
Stoughton Local Diesel	1%	0%	0%	3%	11%	1%
Attleboro Local Electric	9%	3%	8%	1%	34%	2%
Attleboro Local Diesel	1%	0%	0%	0%	9%	0%
Stoughton Local Electric--Whittenton	-2%	0%	-4%	1%	4%	-1%
Stoughton Local Diesel--Whittenton	-3%	0%	-5%	0%	1%	-1%
Rapid Bus	0%	-3%	2%	-1%	7%	3%

As TABLE 1 (above) shows, the build alternatives generally provide greater accessibility to jobs than the no-build/TSM alternative. Also, as TABLE 1 shows, environmental justice zones in these three communities generally experience greater accessibility increases as compared with non-environmental justice zones.

The small decreases in employment accessibility in New Bedford are likely due to the differences between the build alternatives and the no-build/TSM alternative in terms of connectivity with the Southeastern Regional Transit Authority (SRTA) local bus network. Unlike existing and proposed improved private bus service to New Bedford and Fall River, build alternative station locations do not terminate at or directly provide for transfers with the SRTA central bus terminals in New Bedford and Fall River. In the case of New Bedford, this factor, in conjunction with the location of TAZs containing EJ populations, results in some slight accessibility decreases.

Accessibility to Universities and Colleges

This statistic in Table 2 (below) measures the degree to which a given build alternative provides greater access to colleges and hospitals as compared to the no-build/TSM alternative. Transit access measures the change in the number of college enrollment slots and hospital beds between the no-build/TSM and the build alternatives within ninety minutes of environmental and non-environmental justice zones in Fall River, New Bedford, and Taunton. For this analysis the number of enrollment slots and hospital beds available remain constant as between the no-build/TSM and the build alternatives. The analysis accounts for in-vehicle as well as out-of-vehicle transit travel times.

Table 2: Accessibility to Colleges, Universities and Hospitals—Change From No-Build/TSM to Build

TAUNTON COLLEGE ENROLLMENT			TAUNTON HOSPITAL BEDS	
	TRANSIT ACCESS		TRANSIT ACCESS	
	EJ	NonEJ	EJ	NonEJ
Stoughton Local Electric	156%	80%	132%	83%
Stoughton Local Diesel	84%	55%	65%	53%
Attleboro Local Electric	248%	92%	178%	77%
Attleboro Local Diesel	134%	62%	88%	49%
Stoughton Local Electric--Whittenton	104%	33%	58%	32%
Stoughton Local Diesel--Whittenton	56%	22%	28%	20%
Rapid Bus	-1%	0%	-2%	-1%

FALL RIVER COLLEGE ENROLLMENT			FALL RIVER HOSPITAL BEDS	
	TRANSIT ACCESS		TRANSIT ACCESS	
	EJ	NonEJ	EJ	NonEJ
Stoughton Local Electric	70%	82%	414%	159%
Stoughton Local Diesel	56%	67%	340%	139%
Attleboro Local Electric	69%	72%	402%	152%
Attleboro Local Diesel	55%	59%	320%	132%
Stoughton Local Electric--Whittenton	53%	62%	338%	139%
Stoughton Local Diesel--Whittenton	42%	50%	277%	120%
Rapid Bus	15%	3%	167%	35%

NEW BEDFORD COLLEGE ENROLLMENT			NEW BEDFORD HOSPITAL BEDS	
	TRANSIT ACCESS		TRANSIT ACCESS	
	EJ	NonEJ	EJ	NonEJ
Stoughton Local Electric	8%	11%	19%	6%
Stoughton Local Diesel	-2%	1%	1%	0%
Attleboro Local Electric	6%	8%	8%	3%
Attleboro Local Diesel	-1%	1%	1%	0%
Stoughton Local Electric--Whittenton	0%	0%	0%	1%
Stoughton Local Diesel--Whittenton	0%	0%	0%	0%
Rapid Bus	2%	0%	6%	4%

A pattern similar to the employment accessibility results emerges with college enrollment and hospital beds. Transit accessibility to colleges and hospitals for these three cities generally increases from the no-build/TSM to build alternatives. Decreases in college enrollment associated with the rapid bus build alternative are due to run time differences with the no-build/TSM. Once again, the slight decreases in college enrollment accessibility in New Bedford are likely due to the differences in local bus service connectivity provided with the no-build/TSM.

Mobility

This statistic is simply un-weighted in-vehicle travel time from the three South Coast communities to a selected TAZ in Boston (the TAZ in which South Station is located). A positive value represents a travel time savings as compared to the no-build/TSM. The statistic is further broken out between environmental justice zones and non-environmental justice zones.

Table 3: Mobility: In-Vehicle Travel Times to Boston—Change From No-Build/TSM to Build

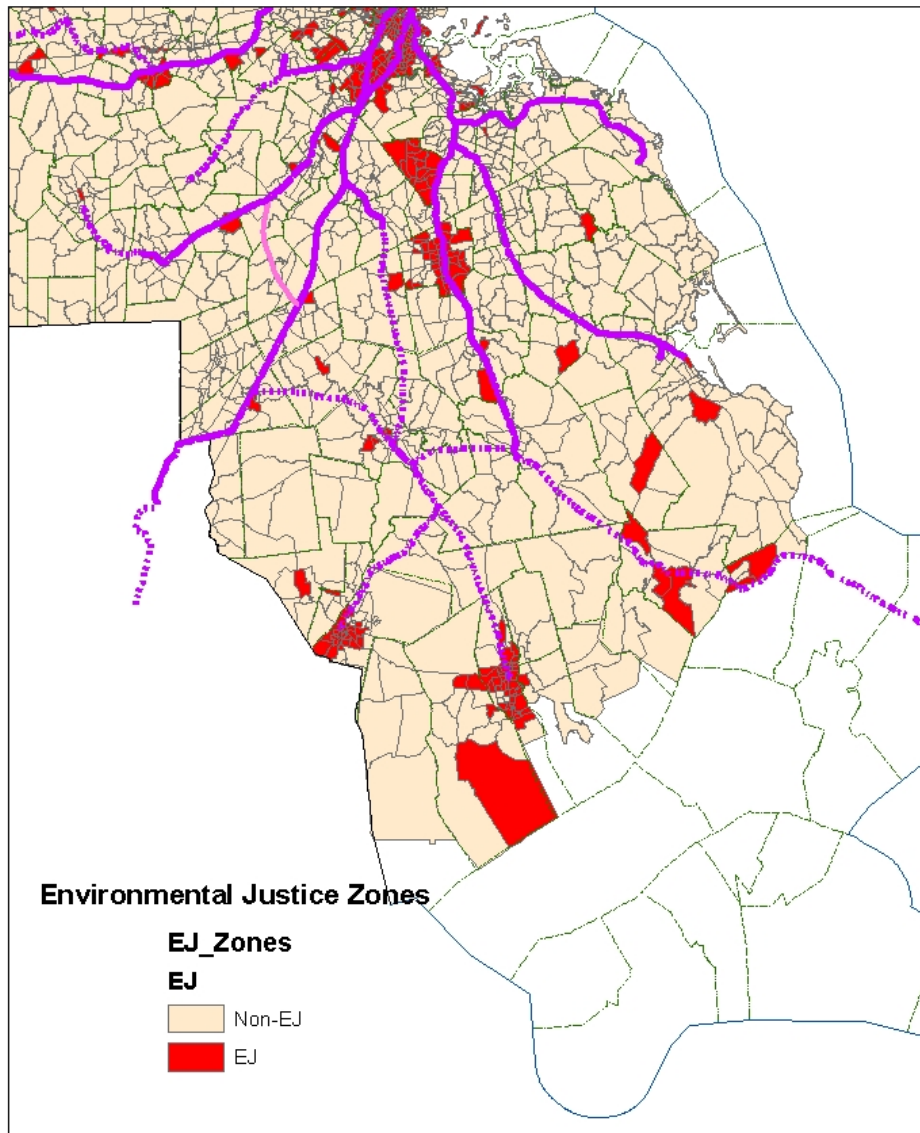
TAUNTON IN-VEHICLE TRAVEL TIME TO BOSTON		
	EJ	NonEJ
Stoughton Local Electric	81%	62%
Stoughton Local Diesel	59%	44%
Attleboro Local Electric	98%	69%
Attleboro Local Diesel	76%	50%
Stoughton Local Electric--Whittenton	63%	43%
Stoughton Local Diesel--Whittenton	44%	30%
Rapid Bus	14%	11%

FALL RIVER IN-VEHICLE TRAVEL TIME TO BOSTON		
	EJ	NonEJ
Stoughton Local Electric	16%	20%
Stoughton Local Diesel	10%	13%
Attleboro Local Electric	17%	21%
Attleboro Local Diesel	11%	14%
Stoughton Local Electric--Whittenton	10%	13%
Stoughton Local Diesel--Whittenton	6%	9%
Rapid Bus	0%	2%

NEW BEDFORD IN-VEHICLE TRAVEL TIME TO BOSTON		
	EJ	NonEJ
Stoughton Local Electric	43%	51%
Stoughton Local Diesel	27%	34%
Attleboro Local Electric	45%	53%
Attleboro Local Diesel	31%	42%
Stoughton Local Electric--Whittenton	26%	32%
Stoughton Local Diesel--Whittenton	20%	22%
Rapid Bus	24%	28%

Table 3 (above) shows that each build alternative, with one exception, offers travel time savings over the no-build/TSM alternative. In some instances, non-environmental justice communities experience slightly greater travel time savings than environmental justice communities. This results from the relative locations of the build stations/stops as compared to the environmental justice and non-environmental justice communities.

South Coast Rail Environmental Justice Zones



Appendix 4.6-A

Noise Monitoring Field Notes



Technical Report
Noise and Vibration
Draft

Attleboro Line



**Technical Report
Noise and Vibration
Draft**

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Day/Night#	Location	Land Use Category	Existing Leq (daytime)	Existing Leq (night time)	
	Taunton				
13 / 14	1 Webster Street • (12/14) ^{HOUSE}	2	415 - 435 56.7	705 - 730 53.4	EOP/SIDEWALK
12 / 15	2 Hoton Street	2	335 - 355 48.4	740 - 800 41.4	EOP
11 / 16	3 Powder Horn Drive	2	3 - 320 48.3	815 - 835 40.7	EOP
9 (10) / 17 (18)	4 Jeffrery Lane • A 1 School Bus @ 220 / 1 UPS TRUCK @ 215 / 1 COPELAND #17 (18)	2	205 - 225 / 220, 250 56.0 / (45.6)	845 - 905 / 905 - 925 51.8 / (39.7)	@ EOP
	Norton				EV 43
8 / 19	5 Garrett Drive	2	125 - 135 39.8	935 - 955 42.7	@ EOP
7 / 20	6 Sturdy Street	2	105 - 125 46.5	1005 - 1025 41.1	30' off EOP
	Attleboro				NIGHT +8
6 / 21	7 Pike Avenue	2	1235 - 1255 55.8	1035 - 1055 50.2	25' off EOP
5 / 22	8 Frontier Drive	2	1205 - 1225 46.8	1105 - 1135 39.9	@ EOP
	Mansfield				
1, 23 (9) / 23 (24)	9 Gilbert Street @ Active Rail + Cars on Gilbert	2	1130 - 1150 T-64.5 / (53.9)	1135 - 1200 T-63.3 / (47.0)	30' EOP

⑨ GILBERT DAY

2 - 1 TRAIN 25 MIN 74.7

3 - 1 TRAIN 20 MIN 64.0

4 0 TRAINS 5 min 53.9

Night

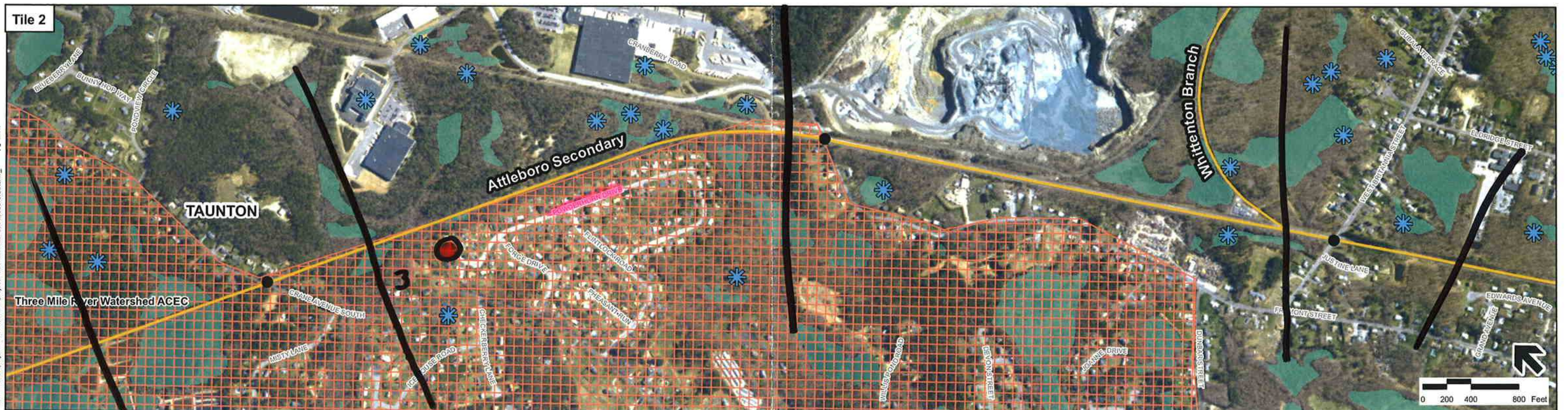
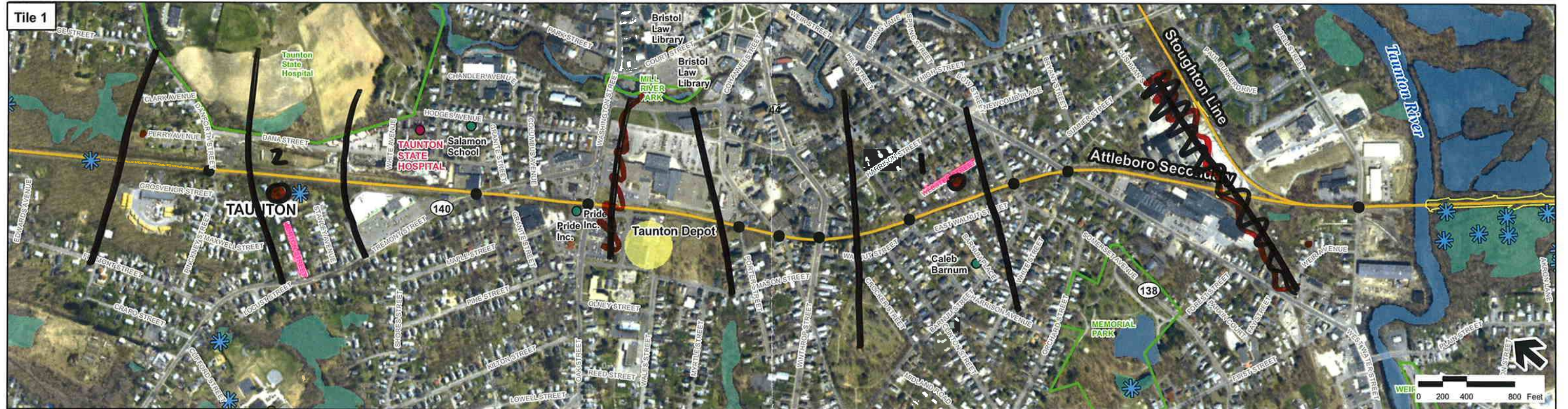
23 - 1 TRAIN 12 MIN 63.3

24 - 0 TRAINS 11 MIN 47.0



**Technical Report
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Draft**

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| ● Community Health Centers | — Proposed Rail Alternative | ☼ NHESP Certified Vernal Pools | ⊠ Area of Critical Environmental Concern (ACEC) |
| ● Hospitals | ● Grade Crossings | ☼ NHESP Potential Vernal Pools | □ Public Open Space |
| ● Libraries | ● Proposed Station Site | ⊠ Zone A Surface Water Supply Protection Areas | — Flagged Wetland (Previous Study) |
| ● Colleges | □ Existing Layover Facilities | ● Public Water Supplies | ■ DEP Wetlands |
| ● Schools | ○ MBTA Commuter Rail Station | ● Zone I (400ft buffer of Public Water Supplies) | ■ DEP Open Water |
| ⊠ Town Boundaries | — MBTA Commuter Rail | | |

Index Map

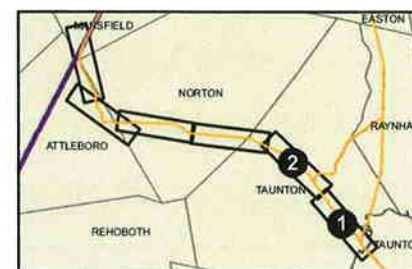


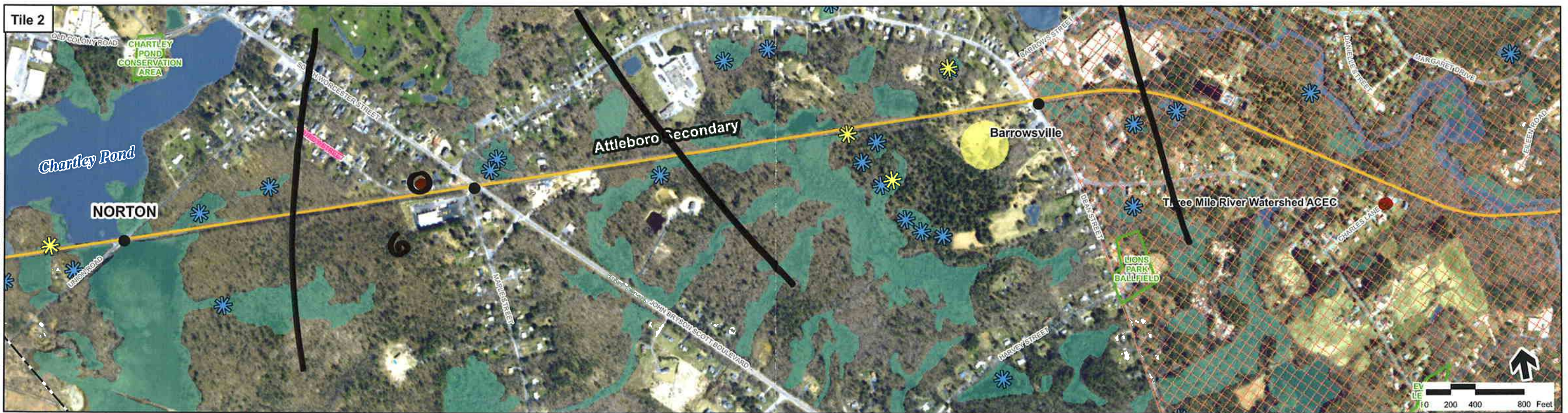
Figure 5-5a
Attleboro Secondary from Cotley Junction to Attleboro Bypass

Source: MassGIS
 Prepared by: Vanasse Hangen Brustlin, Inc.



**Technical Report
Noise and Vibration
Draft**

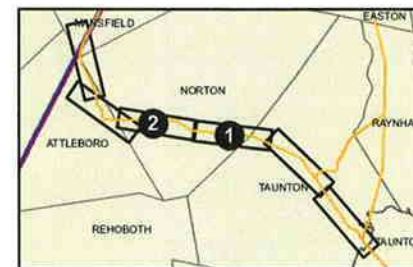
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| □ Town Boundaries | — MBTA Commuter Rail | | |

Index Map



EOT

SCR SOUTH COAST RAIL

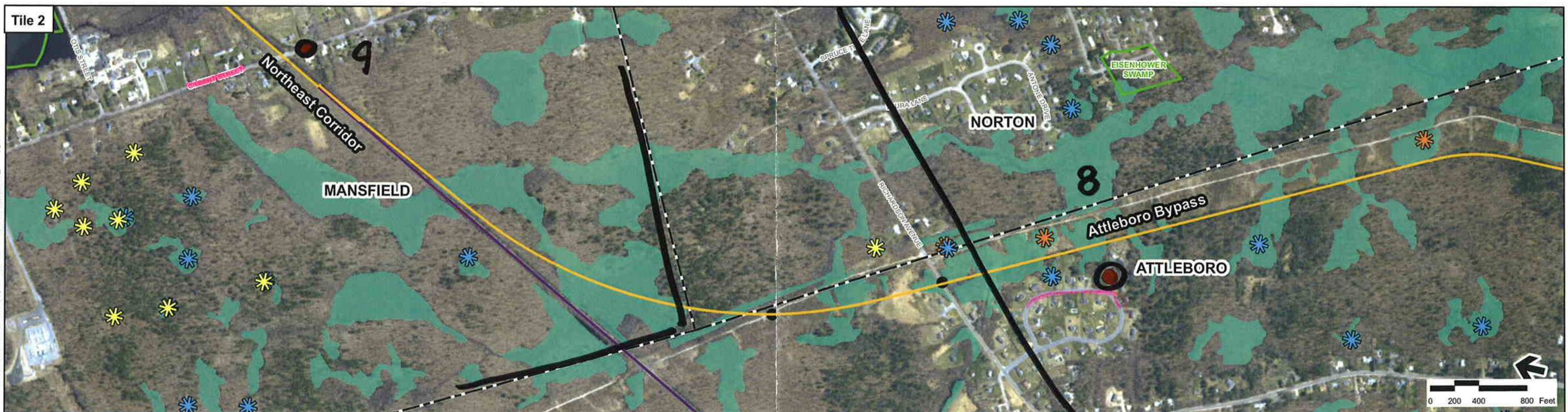
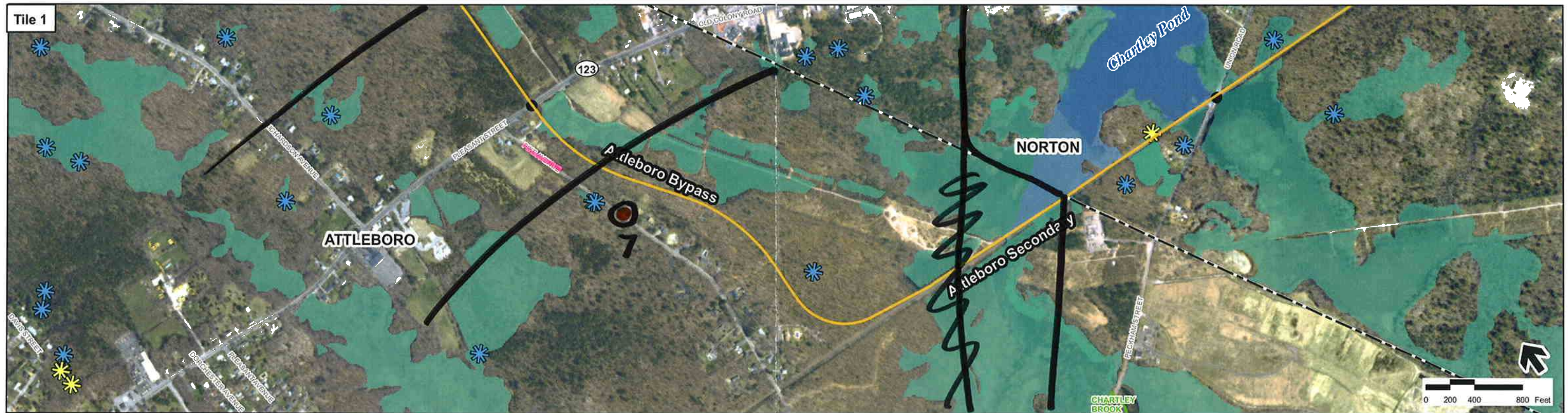
Figure 5-5b
Attleboro Secondary from Cotley Junction to Attleboro Bypass

Source: MassGIS
 Prepared by: Vanasse Hangen Brustlin, Inc.



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Noise and Vibration
Draft

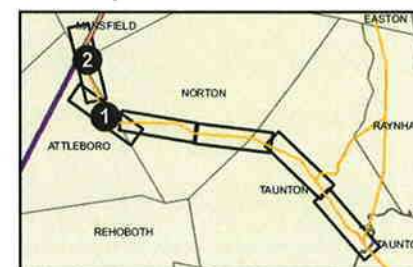
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| ● Community Health Centers | — Proposed Rail Alternative | ☼ NHESP Certified Vernal Pools | ⊠ Area of Critical Environmental Concern (ACEC) |
| ● Hospitals | ● Grade Crossings | ☼ NHESP Potential Vernal Pools | □ Public Open Space |
| ● Libraries | ● Proposed Station Site | ☼ Field Verified Vernal Pools | — Flagged Wetland (Previous Study) |
| ● Colleges | □ Existing Layover Facilities | ▨ Zone A Surface Water Supply Protection Areas | ■ DEP Wetlands |
| ● Schools | ○ MBTA Commuter Rail Station | ● Public Water Supplies | ■ DEP Open Water |
| □ Town Boundaries | — MBTA Commuter Rail | ● Zone I (400ft buffer of Public Water Supplies) | |

Index Map



Frontier Dr.
EOT



Figure 5-5c
Attleboro Secondary from Cotley Junction to Attleboro Bypass

WORK SHEET

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Northeast Corridor



**Technical Report
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Rn#

21

DAY 2,3,4,5

6/13/19

7/17

8/9

10/16

11/14/15

12,13

#	Location	Land Use Category	Existing Leq (daytime)	Existing Leq (night time)
	Dedham		1140 - 1155	945 - 1000
21	Hooper Road	2	44	47.3
	Westwood			
	University Ave (Funeral Institute of			
	Canton			
	I-95 - Industrail		1145 - 1155	945 - 950
20	Cedarcrest Road		48.8	50.2
	Chapman Street		110120	950 - 905
19	Norfolk Street # 123		60.6	56.0
	High Street			
	Sharon			
18	Rhodes Avenue			
	Upland Road (Route 27)		135 - 150	815 - 830
17	Flintlock Road - Deborah Sampson		45.7	44.3
	Chase Drive - Islamic Academy of		210 - 225	
16	Old Wolomolopoag Street		44.2	DOG BARK
	Burnt Bridge Rd			
	Foxborough			
	East Street		240 - 255	750 - 800
15	Keryns Way EAST ST (#140)		60.7	53.1
	Summer Street			
	Mansfield			
14	Angell Street			
	Chauncy Street		310 - 325	725 - 740
13	Central Street		52.0	48.9
12	Old School Street		59.6	57.0
	Otis Street		305 - 350	710 - 715
10	Gilbert Street (without Trains)	2	53.9	47.0

50' from BARRIER @ EOP

Amusement MUSEE Anti, Sla
@ Cul de Sac EOP

on SW @ 123 N/O Paul

@ Cul de Sac EOP

@ Cul de Sac EOP

25' OFF EOP (Kids @ Play)

EOP 25' FROM END OF Cul De Sac
@ Ground turn around 2 100' FROM it

14 - DOG BARK - JUNK

15, ON HIGH ST.

#18 w/ TRAIN 3 min 64.9 dBA 340 - 345

#2 w/ TRAIN 5 min 70.5 dBA (1225 - 1230)

#3 w/ TRAIN 4 min 60.1 (1230 - 1235)

#4 w/ TRAIN 5 min 67.3 (1235 - 1240)

#5 w/ TRAIN 1 min 62.7 (202 - 203)

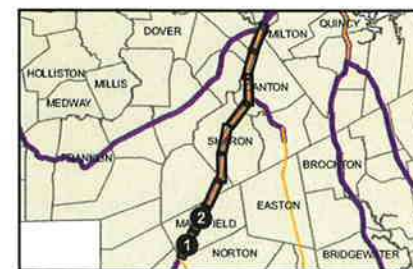
Location	Land Use Category	Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn
Dedham				
Hooper Road		44	47.3	50.3
Westwood				
University Ave (Funeral Institute of the North East)				
Canton				
I-95 - Industrial				
Cedarcrest Road		48.8	50.2	53.2
Chapman Street				
Norfolk Street		60.6	56.0	59.0
High Street				
Sharon				
Rhodes Avenue				
Upland Road (Route 27)				
Flintlock Road - Deborah Sampson Park)		45.7	44.3	47.3
Chase Drive - Islamic Academy of N.E.				
Burnt Bridge Road		44.2	-	42.2
Foxborough				
East Street		60.7	53.1	56.1
Summer Street				
Mansfield				
Angell Street				
Chauncy Street (Route 106)				
Central Street / High Street		52.0	48.9	51.9
Old School Street		59.6	57.0	60.0
Otis Street				
Gilbert Street (without Trains)	2	53.9	47.0	55.0
Gilbert Street (with Trains)	2	64.0	63.3	71.3



Legend

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|----------------------------|-------------------------------|--|---|
| ● Community Health Centers | — Proposed Rail Alternative | ☼ NHESP Certified Vernal Pools | ⊠ Area of Critical Environmental Concern (ACEC) |
| ● Hospitals | ● Grade Crossings | ☼ NHESP Potential Vernal Pools | □ Public Open Space |
| ● Libraries | ● Proposed Station Site | ☼ Zone A Surface Water Supply Protection Areas | — Flagged Wetland (Previous Study) |
| ● Colleges | □ Existing Layover Facilities | ● Public Water Supplies | ■ DEP Wetlands |
| ● Schools | ○ MBTA Commuter Rail Station | ● Zone I (400ft buffer of Public Water Supplies) | ■ DEP Open Water |
| --- Town Boundaries | — MBTA Commuter Rail | | |

Index Map



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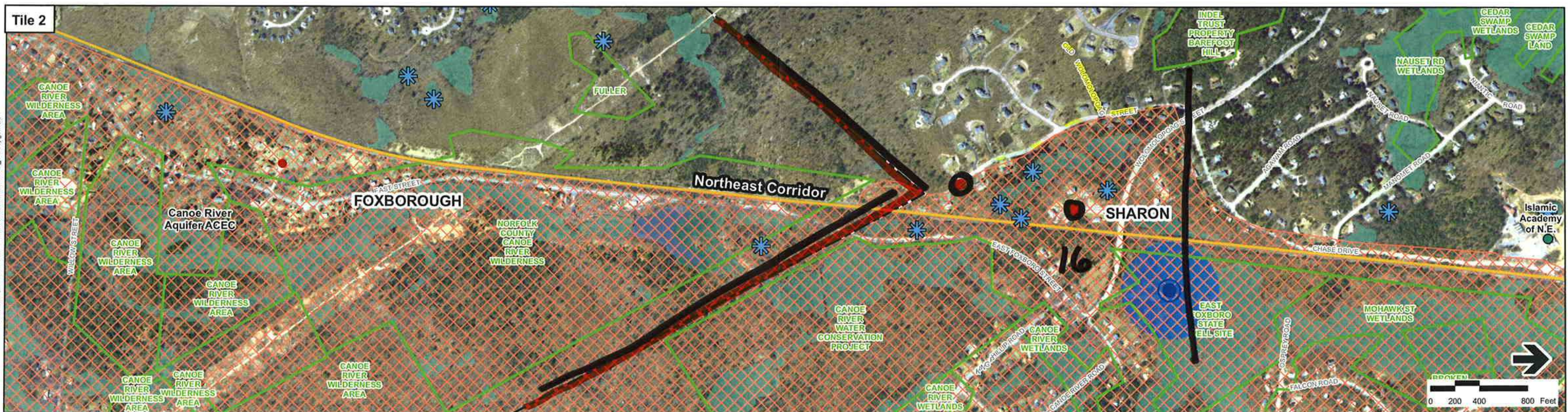
Source: MassGIS
Prepared by: Vanasse Hangen Brustlin, Inc.



Figure 5-6a

Northeast Corridor

15 - Keryas Way



10/21/2008
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| ● Community Health Centers | — Proposed Rail Alternative | ☼ NHESP Certified Vernal Pools | ☒ Area of Critical Environmental Concern (ACEC) |
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| □ Town Boundaries | — MBTA Commuter Rail | | |

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EOT



Figure 5-6b

Northeast Corridor

Source: MassGIS
Prepared by: Vanasse Hangen Brustlin, Inc.

17 - Flintlock Road



Legend

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|----------------------------|-------------------------------|--|---|
| ● Community Health Centers | — Proposed Rail Alternative | ☼ NHESP Certified Vernal Pools | ⊞ Area of Critical Environmental Concern (ACEC) |
| ● Hospitals | ● Grade Crossings | ☼ NHESP Potential Vernal Pools | □ Public Open Space |
| ● Libraries | ● Proposed Station Site | ☼ Zone A Surface Water Supply Protection Areas | — Flagged Wetland (Previous Study) |
| ● Colleges | □ Existing Layover Facilities | ● Public Water Supplies | ■ DEP Wetlands |
| ● Schools | ○ MBTA Commuter Rail Station | ● Zone I (400ft buffer of Public Water Supplies) | ■ DEP Open Water |
| □ Town Boundaries | — MBTA Commuter Rail | | |

Index Map



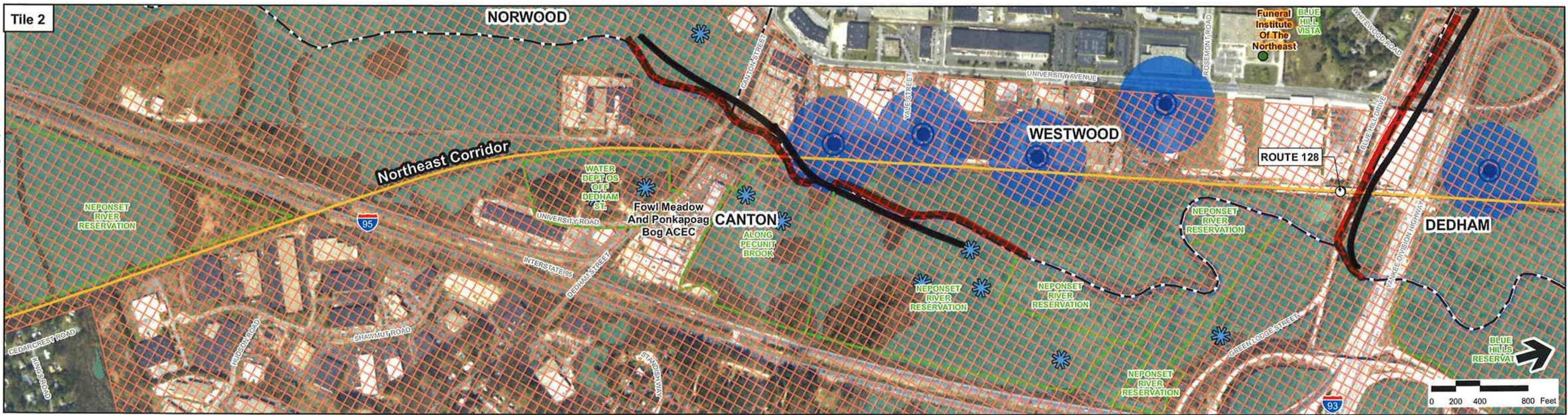
Source: MassGIS
Prepared by: Vanasse Hangen Brustlin, Inc



Figure 5-6c

Northeast Corridor

19- Hantwell
Pl X 123 Northol



- Legend**
- Community Health Centers
 - Hospitals
 - Libraries
 - Colleges
 - Schools
 - Town Boundaries
 - Proposed Rail Alternative
 - Grade Crossings
 - Proposed Station Site
 - Existing Layover Facilities
 - MBTA Commuter Rail Station
 - MBTA Commuter Rail
 - NHESP Certified Vernal Pools
 - NHESP Potential Vernal Pools
 - Zone A Surface Water Supply Protection Areas
 - Public Water Supplies
 - Zone I (400ft buffer of Public Water Supplies)
 - Area of Critical Environmental Concern (ACEC)
 - Public Open Space
 - Flagged Wetland (Previous Study)
 - DEP Wetlands
 - DEP Open Water

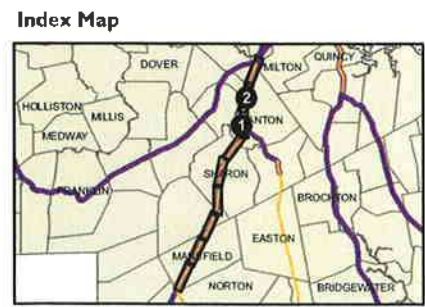


Figure 5-6d

Northeast Corridor

Source: MassGIS
Prepared by: Vanasse Hangen Brustlin, Inc



NB.

Resident suggests extending Boston.

Said it was not short 1 parcel.

@ EOP
 350' from
 I-95
 END OF RD.

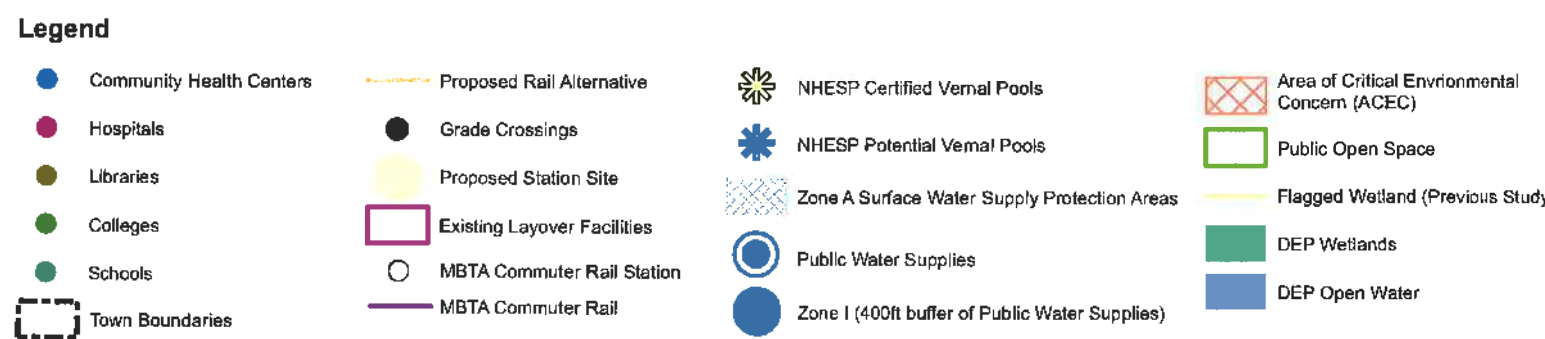


Figure 5-6e

Northeast Corridor

Source: MassGIS
 Prepared by: Vanasse Hangen Brustlin, Inc.



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Technical Report
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Southern Triangle



**Technical Report
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101 Walnut Street
Post Office Box 9151
Watertown
Massachusetts 02272
617 924 1770
FAX 617 924 2286

Noise
Monitoring
Data

Notes Taken
By: NBS

Date: 12/30/2008

Project No.:

Site: # |

Weather: 40° WIND

Noise Monitor: Larsen Davis 824

Time Start: 1040 AM - 1100 AM
Duration: 20 Minutes 800 PM - 820

What was the name of the data run? COTLEY ST DAY / # 10 Night

Results

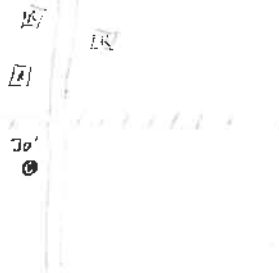
Leq

Traffic Data Volumes Speeds

Automobiles
Medium Trucks
Heavy Trucks

51.6 / 45.6

Sketch



Notes:

What was the angle of exposure to the highway? 0

Were there any objects blocking the highway noise sources? (Such as buildings or hills)

No TRAFFIC ON COTLEY ST @ RR XING

Were there other roadway or highway noise sources nearby?

Were there significant other non-highway noise sources? WIND

Ldn = 49.6 / 48.6



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Massachusetts 02272
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FAX 617 924 2286

Noise Monitoring Data

Notes Taken
By: NBS

Date: 12-30-03

Project No.:

Site: #2

Weather: 40' WIND

Noise Monitor: Larsen Davis 824

Time Start: 11:15 AM - 11:35

Duration: 20 Minutes 830-850 PM

What was the name of the data run? #2 GREEN #11

Results

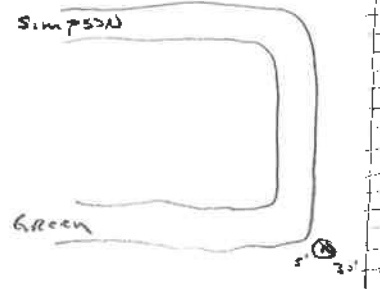
Leq

Traffic Data Volumes Speeds

Automobiles
Medium Trucks
Heavy Trucks

55.3 / 41.2

Sketch



Notes:

What was the angle of exposure to the highway?

Were there any objects blocking the highway noise sources? (Such as buildings or hills)

Were there other roadway or highway noise sources nearby? GREEN SIMPSON

LITTLE TO NO TRAFFIC

Were there significant other non-highway noise sources?

Ldn = 53.3 / 44.2



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**Noise
Monitoring
Data**

Notes Taken
By: NBS

Date: 12-30-09

Project No.:

Site: #3

Weather: 40° WIND

Noise Monitor: Larsen Davis 824

Time Start: 1150 - 1210

Duration: 20 Minutes

900 - 920

What was the name of the data run?

#3 Rolling Green #12

Results

Leq

Traffic Data

Volumes

Speeds

Automobiles

Medium Trucks

Heavy Trucks

55.5 / 43.8

Sketch

Notes:

What was the angle of exposure to the highway?

Were there any objects blocking the highway noise sources? (Such as buildings or hills)

Were there other roadway or highway noise sources nearby?

Were there significant other non-highway noise sources?

WIND

Neighborhood Noise
Kids @ play

Ldn = 53.5 / 46.8



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Noise Monitoring Data

Notes Taken
By: NBS

Date: 12-30-08

Project No.:

Site: #4

Weather: 40° Wind

Noise Monitor: Larsen Davis 824

Time Start: 1225-1245

930-950

Duration: 20 Minutes

What was the name of the data run? #4 Cory St #B

Results

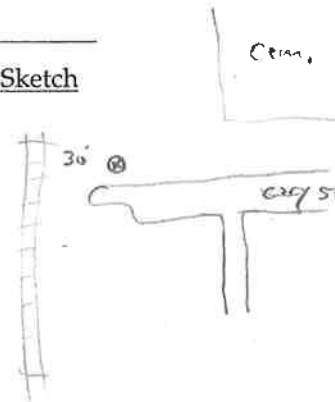
Leq

57.2 / 52.1

Sketch

Traffic Data Volumes Speeds

Automobiles
Medium Trucks
Heavy Trucks



Notes:

What was the angle of exposure to the highway? _____

Were there any objects blocking the highway noise sources? (Such as buildings or hills) _____

Were there other roadway or highway noise sources nearby? CARS URBAN NOISE

Were there significant other non-highway noise sources? WIND

Ldn = (55.2) / (55.1)

Dog Barking
(Not too close/ loud)



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Massachusetts 02272
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**Noise
Monitoring
Data**

Notes Taken
By: NBS

Date: 12/30/09

Project No.:

Site: #5

Weather: 40° WIND

Noise Monitor: Larsen Davis 824

Time Start: 11:00 - 1:30 1015 - 1035

Duration: 20 Minutes

What was the name of the data run? #5 EARLE ST #14

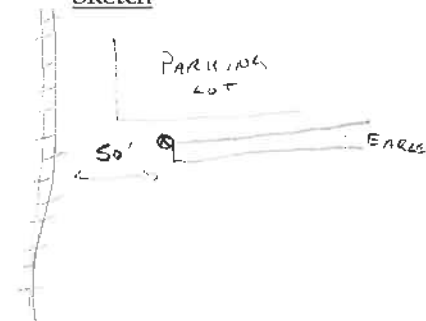
Results

Leq

55.6 / 47.6

Sketch

Traffic Data Volumes Speeds
Automobiles
Medium Trucks
Heavy Trucks



Notes:

What was the angle of exposure to the highway? _____

Were there any objects blocking the highway noise sources? (Such as buildings or hills) _____

Were there other roadway or highway noise sources nearby? _____

Were there significant other non-highway noise sources? WIND

$$L_{dn} = (53.6) / (55.6)$$



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Noise
Monitoring
Data

Notes Taken
By: NBS

Date: 12-30-08

Project No.:

Site: #6

Weather: 40° Wind

Noise Monitor: Larsen Davis 824

Time Start: 2:40 - 3:00 1045 - 11:05

Duration: 20 Minutes

What was the name of the data run? #6 Welby Rd #15

Results

Leq

51.8 44.1

Traffic Data

Volumes

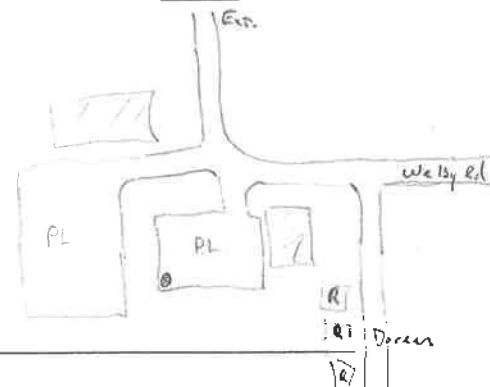
Speeds

Automobiles

Medium Trucks

Heavy Trucks

Sketch



Notes:

What was the angle of exposure to the highway? _____

Were there any objects blocking the highway noise sources? (Such as buildings or hills) _____

Were there other roadway or highway noise sources nearby? _____

Were there significant other non-highway noise sources? _____

Ldn = 49.8 / 52.1



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**Noise
Monitoring
Data**

Notes Taken
By: NBS

Date: 12-30-08

Project No.:

Site: #7

Weather: 40 Windy

Noise Monitor: Larsen Davis 824

Time Start: 3:5 - 3:35 11:20 11:40

Duration: 20 Minutes

What was the name of the data run? #7 GUNDE'S WAY #16

Results

Leq

48.7 35.6

Sketch

Traffic Data Volumes Speeds

Automobiles

Medium Trucks

Heavy Trucks



Notes:

What was the angle of exposure to the highway? _____

Were there any objects blocking the highway noise sources? (Such as buildings or hills) _____

Were there other roadway or highway noise sources nearby? _____

Were there significant other non-highway noise sources? _____

Ldn = 46.7 / 43.6



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Noise Monitoring Data

Notes Taken
By: NBS

Date: 12-30-03

Project No.:

Site: # 8

Weather: 40° WIND

Noise Monitor: Larsen Davis 824

Time Start: 4:00 - 4:20 12:00 - 12:20

Duration: 20 Minutes

What was the name of the data run? # 8 GATSBY # 17

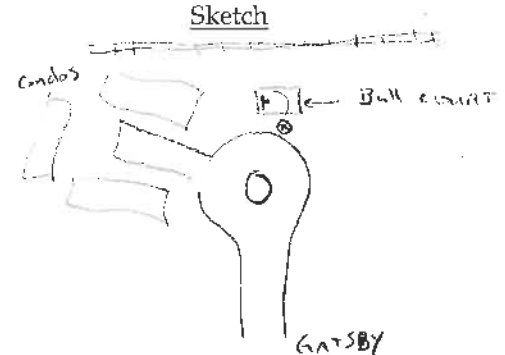
Results

Leq

43.2 36.0

Traffic Data Volumes Speeds

Automobiles
Medium Trucks
Heavy Trucks



Notes:

What was the angle of exposure to the highway?

Were there any objects blocking the highway noise sources? (Such as buildings or hills)

Were there other roadway or highway noise sources nearby?

Were there significant other non-highway noise sources?

Ldn = 41.2 / 44



101 Walnut Street
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Watertown
Massachusetts 02272
617 924 1770
FAX 617 924 2286

**Noise
Monitoring
Data**

Notes Taken
By: NBS

Date: 12-30-03

Project No.:

Site: #9

Weather: 40° WIND (slight)

Noise Monitor: Larsen Davis 824

Time Start: 430 - 450 1230 - 1250

Duration: 20 Minutes

What was the name of the data run? #9 Middleboro Ave #18

Results

Leq

Traffic Data

Volumes

Speeds

Automobiles

Medium Trucks

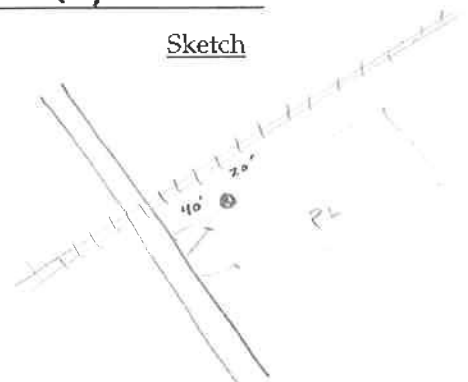
Heavy Trucks

65.1

54.6

35

Sketch



Notes:

What was the angle of exposure to the highway? 120°

Were there any objects blocking the highway noise sources? (Such as buildings or hills)

NO

Were there other roadway or highway noise sources nearby?

NO

Were there significant other non-highway noise sources?

NO

L_{dn} =

63.1

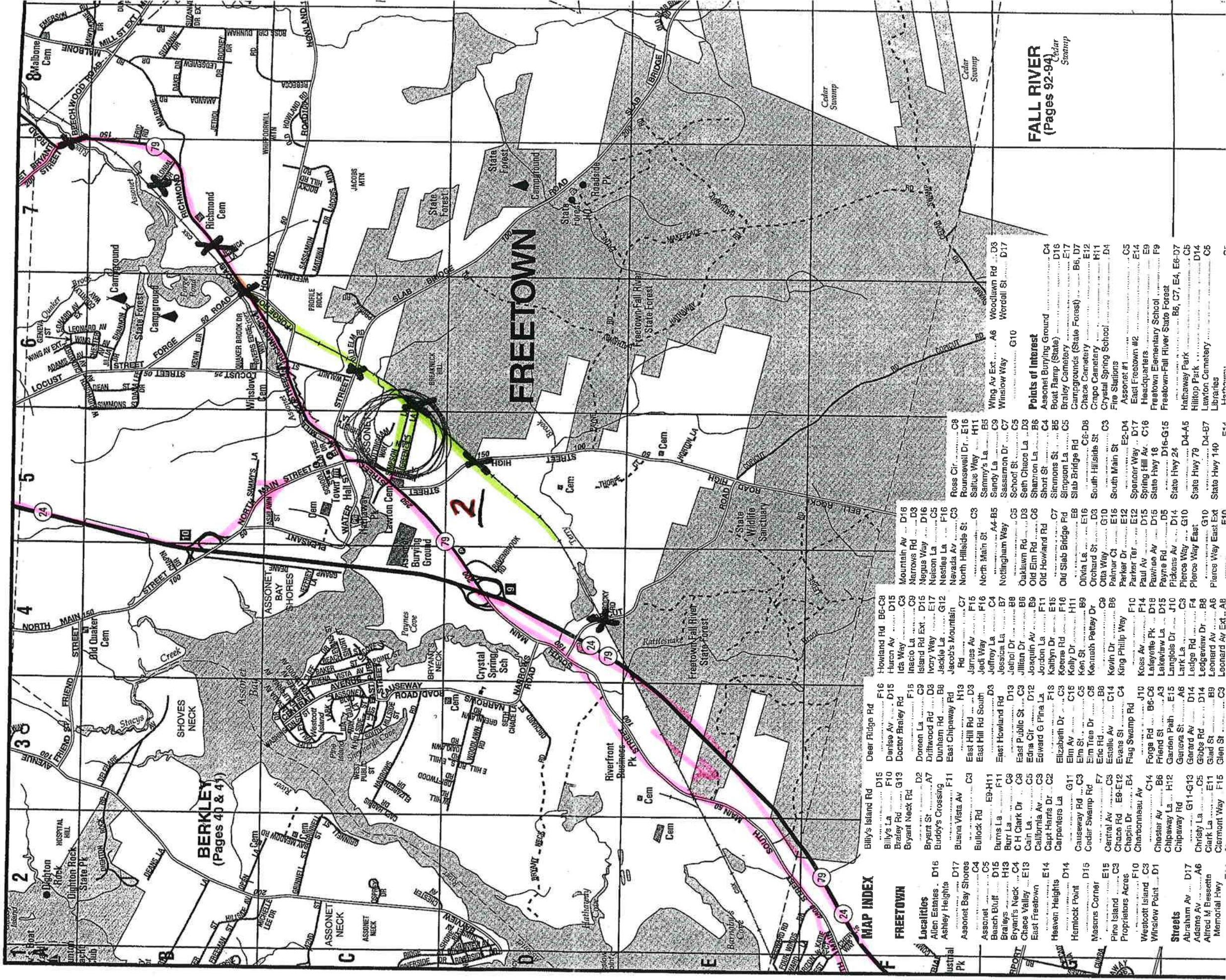
62.6



**Technical Report
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100 FREETOWN



FALL RIVER (Pages 92-94)

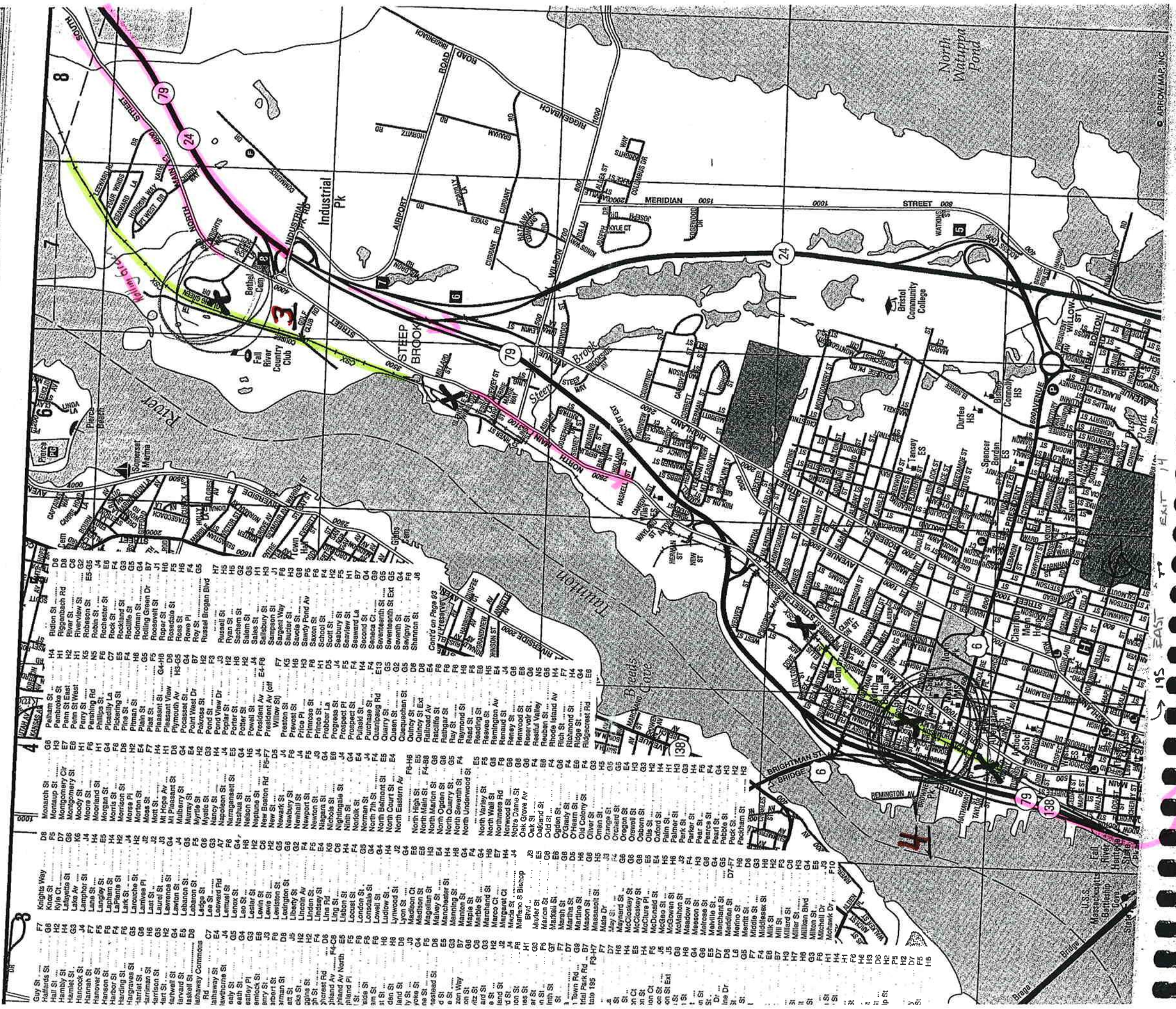
Cedar Swamp

Points of Interest

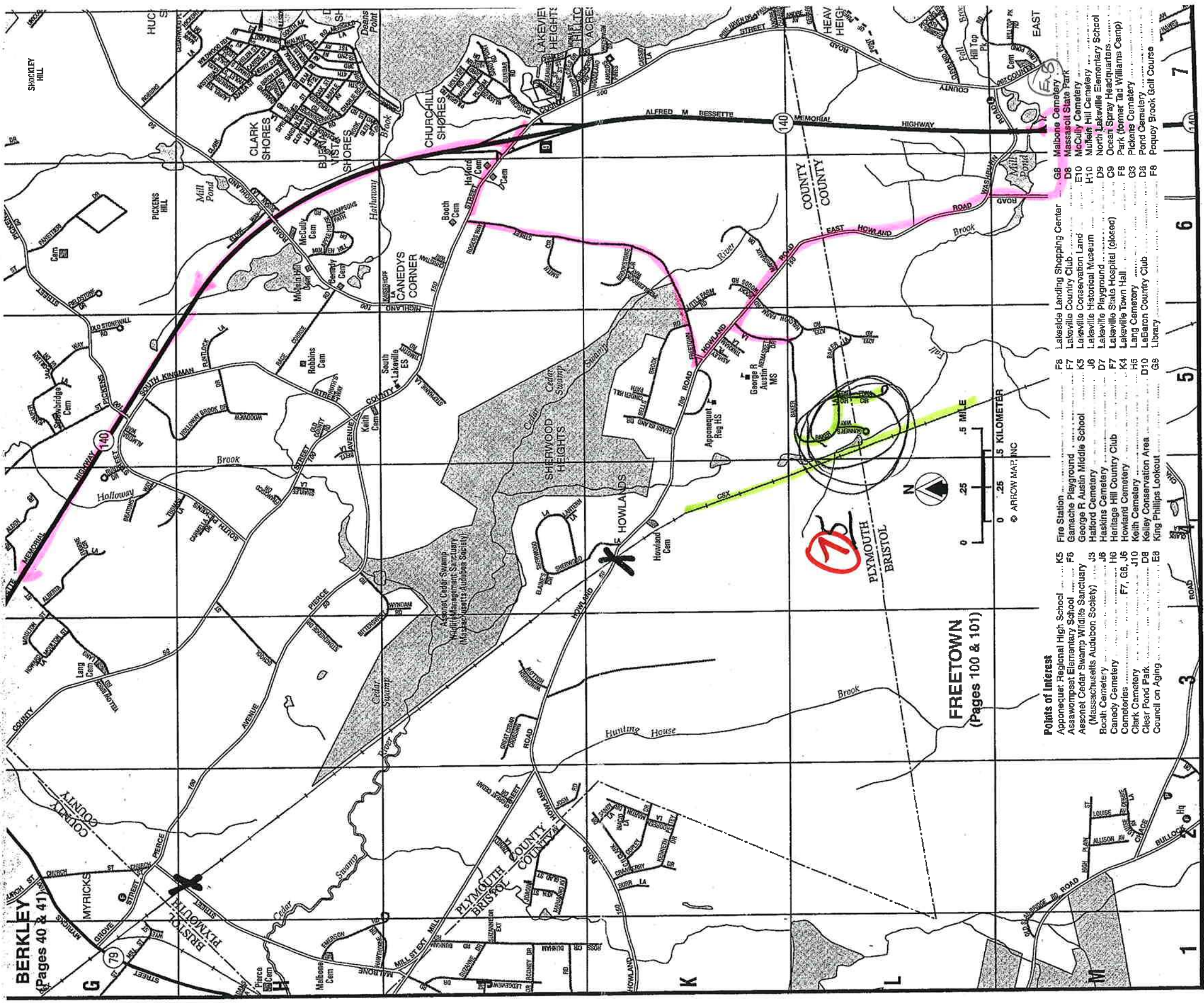
- Assonet Burying Ground C4
- Boat Ramp (State) D16
- Braley Cemetery E17
- Campgrounds (State Forest) B6, D7
- Chace Cemetery E12
- Croco Cemetery H11
- Crystal Spring School D4
- Fire Stations C5
- Assonet #1 E14
- East Freetown #2 E9
- Headquarters F9
- Freetown Elementary School B6, C7, E4, E8-D7
- Freetown-Fall River State Forest D14
- Hatfield Park C5
- Hilltop Park D4-B7
- Lawton Cemetery C5
- Libraries

Streets

- Abraham Av D17
- Adams Av A6
- Alfred M Bessette
- Memorial Hwy F15



(4) Between Cory St and Brownell St

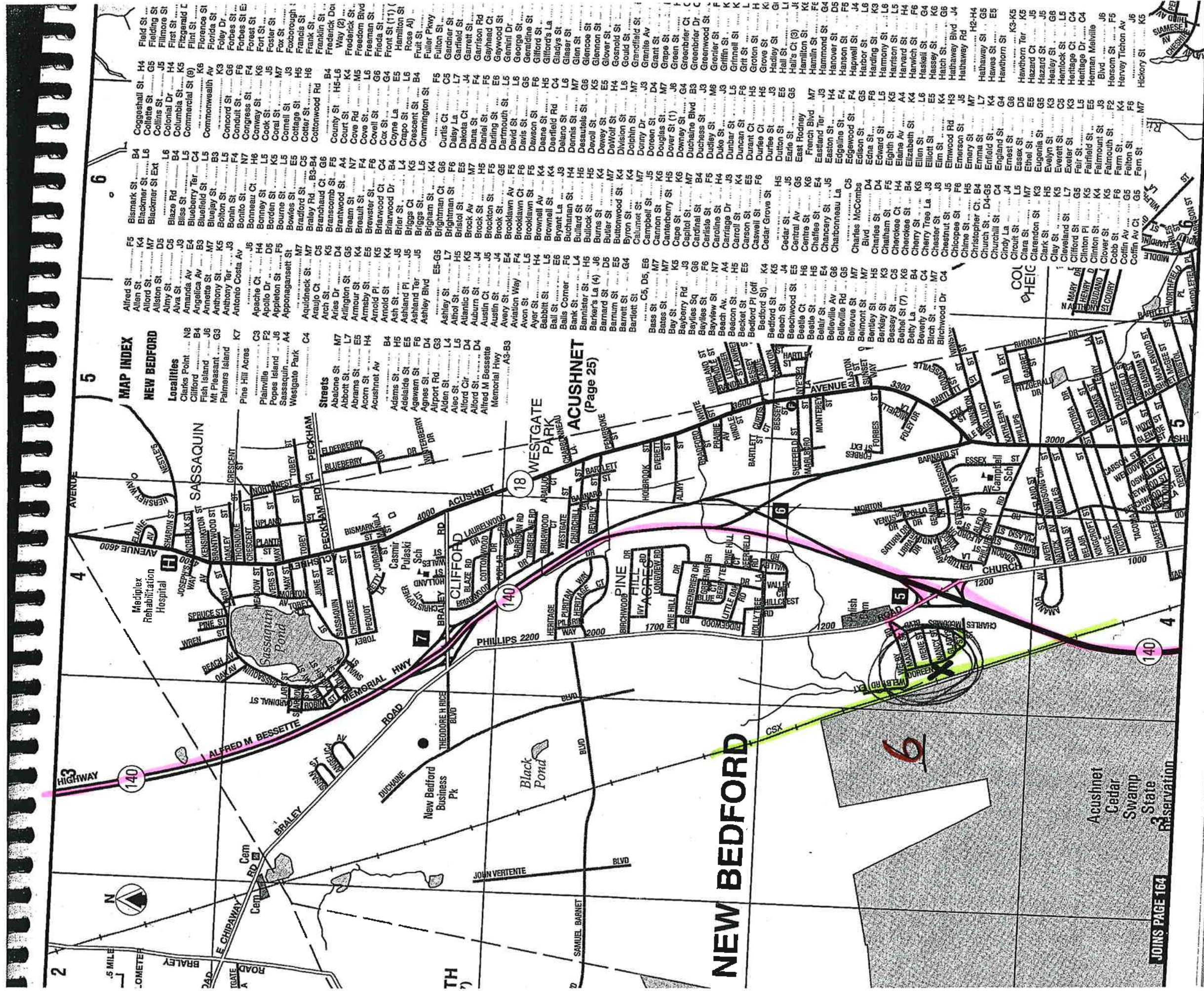


BERKLEY
(Pages 40 & 41)

FREETOWN
(Pages 100 & 101)

Points of Interest

- Apponequet Regional High School K5
- Assawompset Elementary School F8
- Assonet Cedar Swamp Wildlife Sanctuary J3
- (Massachusetts Audubon Society)
- Booth Cemetery J8
- Canedy Cemetery H6
- Cemeteries F7, G6, J6
- Clark Cemetery J10
- Clear Pond Park D8
- Council on Aging E8
- Fire Station K5
- Gamache Playground F8
- George R Austin Middle School K5
- Hafford Cemetery J3
- Haskins Cemetery J8
- Heritage Hill Country Club H6
- Howland Cemetery J10
- Keith Cemetery D8
- Keith Conservation Area E8
- King Phillips Lookout
- Lakeside Landing Shopping Center F8
- Lakeville Country Club F7
- Lakeville Conservation Land K5
- Lakeville Historical Museum J6
- Lakeville Playground D7
- Lakeville State Hospital (closed) F7
- Lakeville Town Hall K4
- Lang Cemetery H8
- LeBaron Country Club D10
- Library G8
- Malbone Cemetery G8
- Massasoit State Park D8
- McCully Cemetery E10
- Mullen Hill Cemetery H10
- North Lakeville Elementary School D9
- Ocean Spray Headquarters C9
- Park (former Tad Williams Camp) F8
- Pickens Cemetery G3
- Pond Cemetery D8
- Poquoy Brook Golf Course F8





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Stoughton Line

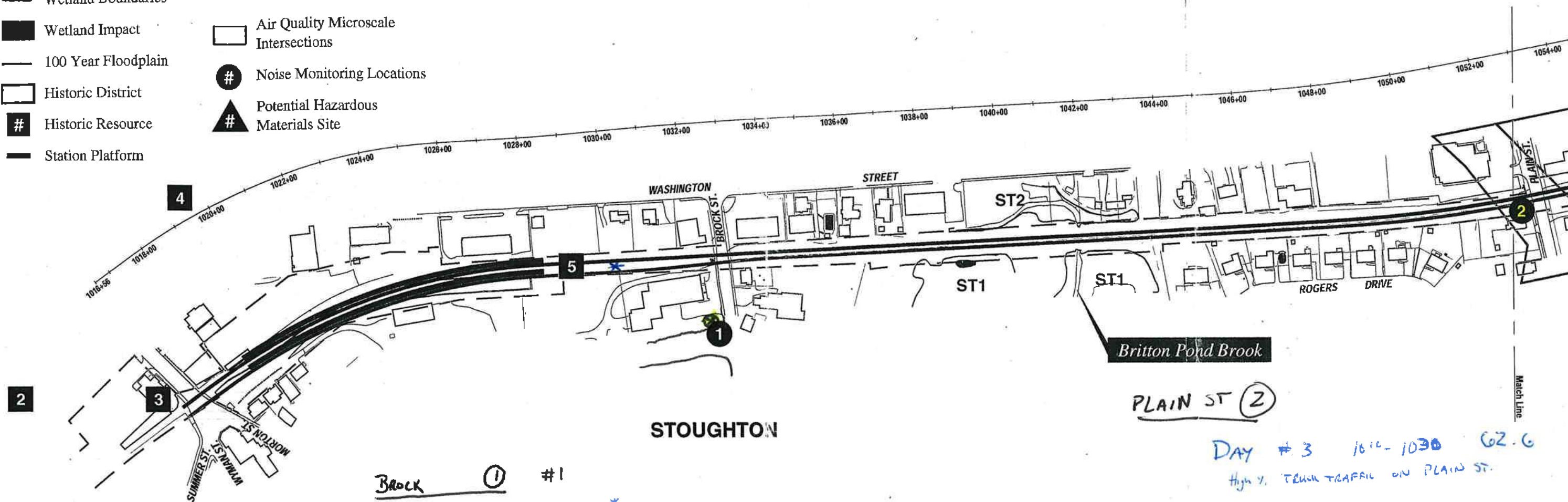


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Draft**

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- Proposed Track 1
- Proposed Track 2
- - - Right of Way
- Water
- Wetland Boundaries
- Wetland Impact
- 100 Year Floodplain
- Historic District
- # Historic Resource
- Station Platform
- Rare Species Habitat and Significant Natural Communities
- ▨ Estimated Habitat of Rare Wildlife
- ▨ DEP Approved Zone II Well Head Protection Area
- Air Quality Microscale Intersections
- Noise Monitoring Locations
- ▲ Potential Hazardous Materials Site

ALL DAY DATA 12/18/08
Night DATA 12/18/08 - 12/19/08

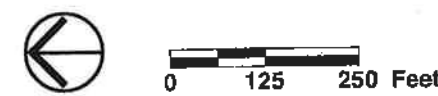
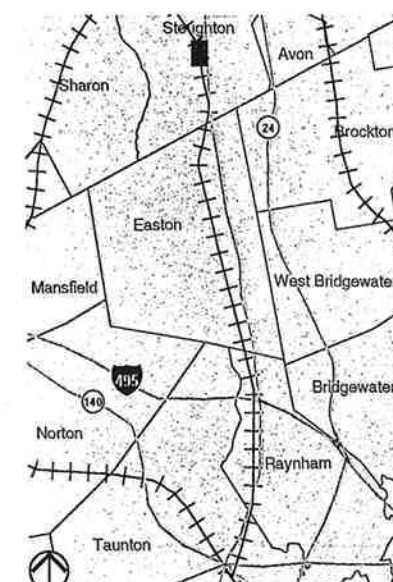


Back ① #1

Day	#	Time	Value
DAY	#1	*930 - 945	56.7
	#2	945 - 1000	59.4
	#22	245 - 255 AM	45.3
Low Memory (12-31-08)			42.4
	#23	255 - 305 AM	
AG CHECK			

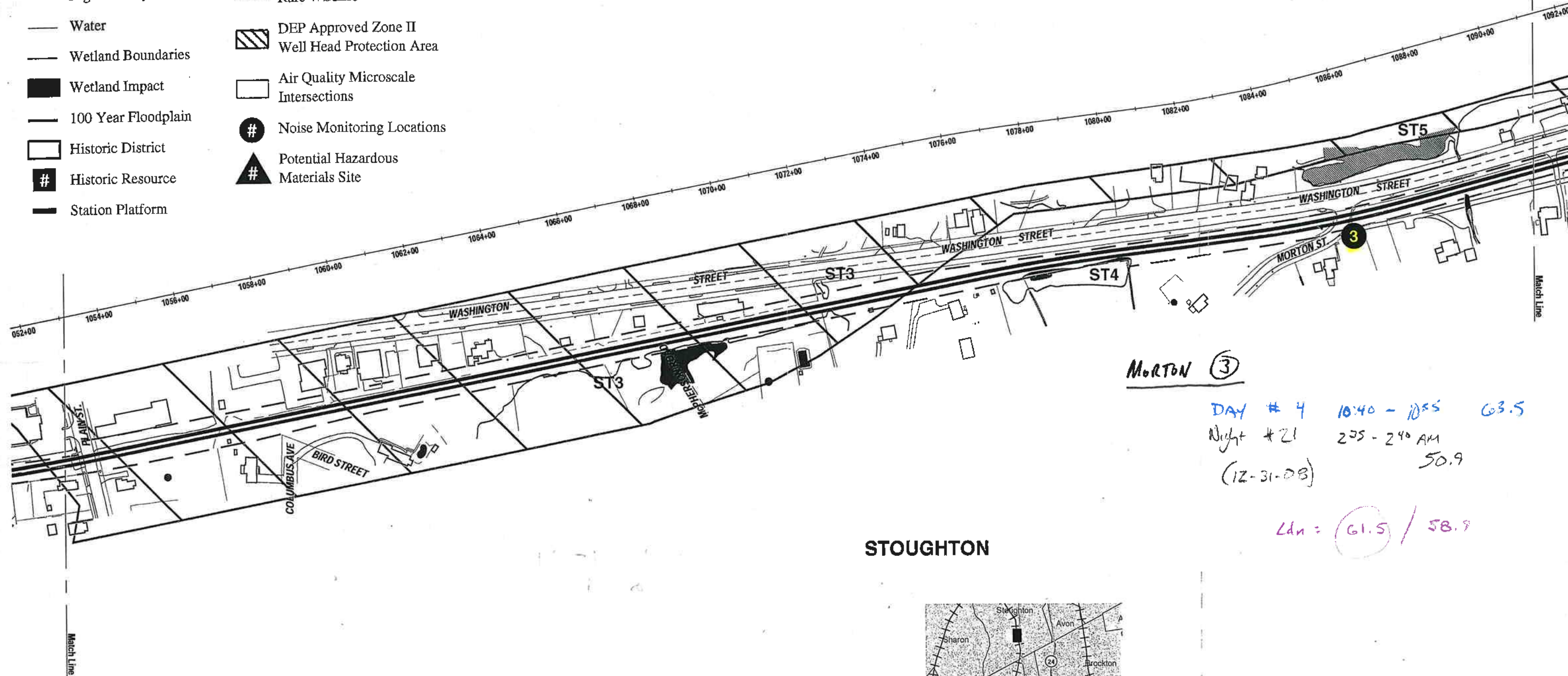
Ldn = 50.4 / 50.4
57.4

DAY #3 1012 - 1030 62.6
High V. TRUCK TRAFFIC ON PLAIN ST.
Ldn = 60.6



#1 * TRAIN IDLING BEHIND BUILDING

- Proposed Track 1
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STOUGHTON



MORTON ③

DAY # 4 10:40 - 10:55 63.5
 Night # 21 2:35 - 2:40 AM 50.9
 (12-31-08)

LDN = 61.5 / 58.9



0 125 250 Feet

New Bedford / Fall River Commuter Rail



Massachusetts
 Bay
 Transportation
 Authority

Figure 2.3-2
 Stoughton Branch
 Sheet 2 of 23

- Proposed Track 1
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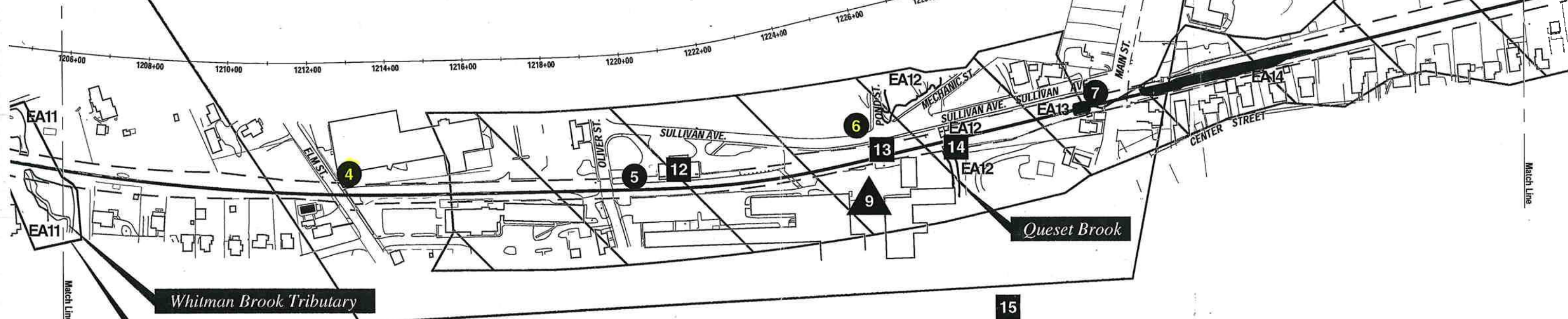
SULL/POND ⑥

DAY # 6 1130 - 1145 55.8

Night # 19 150 - 205 Am 38.8
(12-31-03)

Ldn = 53.8 / 46.8

North Easton Historic District (portion)



Whitman Brook Tributary

Approximate Floodplain no Base Flood Elevation Provided

ELM ④

DAY # 5 1105 - 1120 64.8

Night # 20 210 - 225 Am 48.8
(12-31-03)

Ldn = 59.8 / 56.8

EASTON



0 125 250 Feet



Massachusetts
Bay
Transportation
Authority

New Bedford / Fall River Commuter Rail

Figure 2.3-2
Stoughton Branch
Sheet 6 of 23

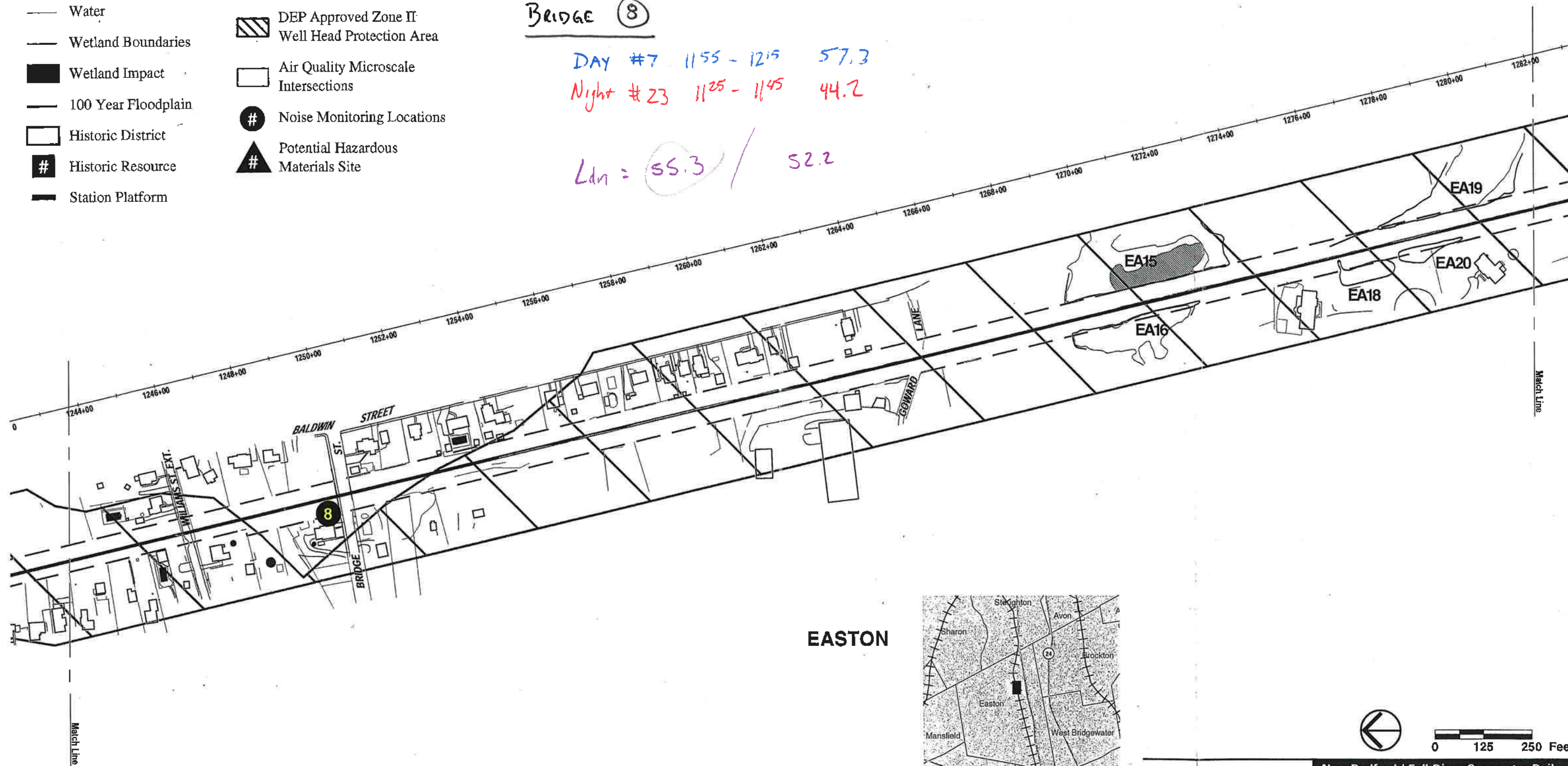
- Proposed Track 1
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- - - Right of Way
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- # Noise Monitoring Locations
- ▲ Potential Hazardous Materials Site

BRIDGE ⑧

DAY #7 1155 - 1215 57.3

NIGHT #23 1125 - 1145 44.2

Ldn = 55.3 / 52.2



EASTON



0 125 250 Feet

New Bedford / Fall River Commuter Rail



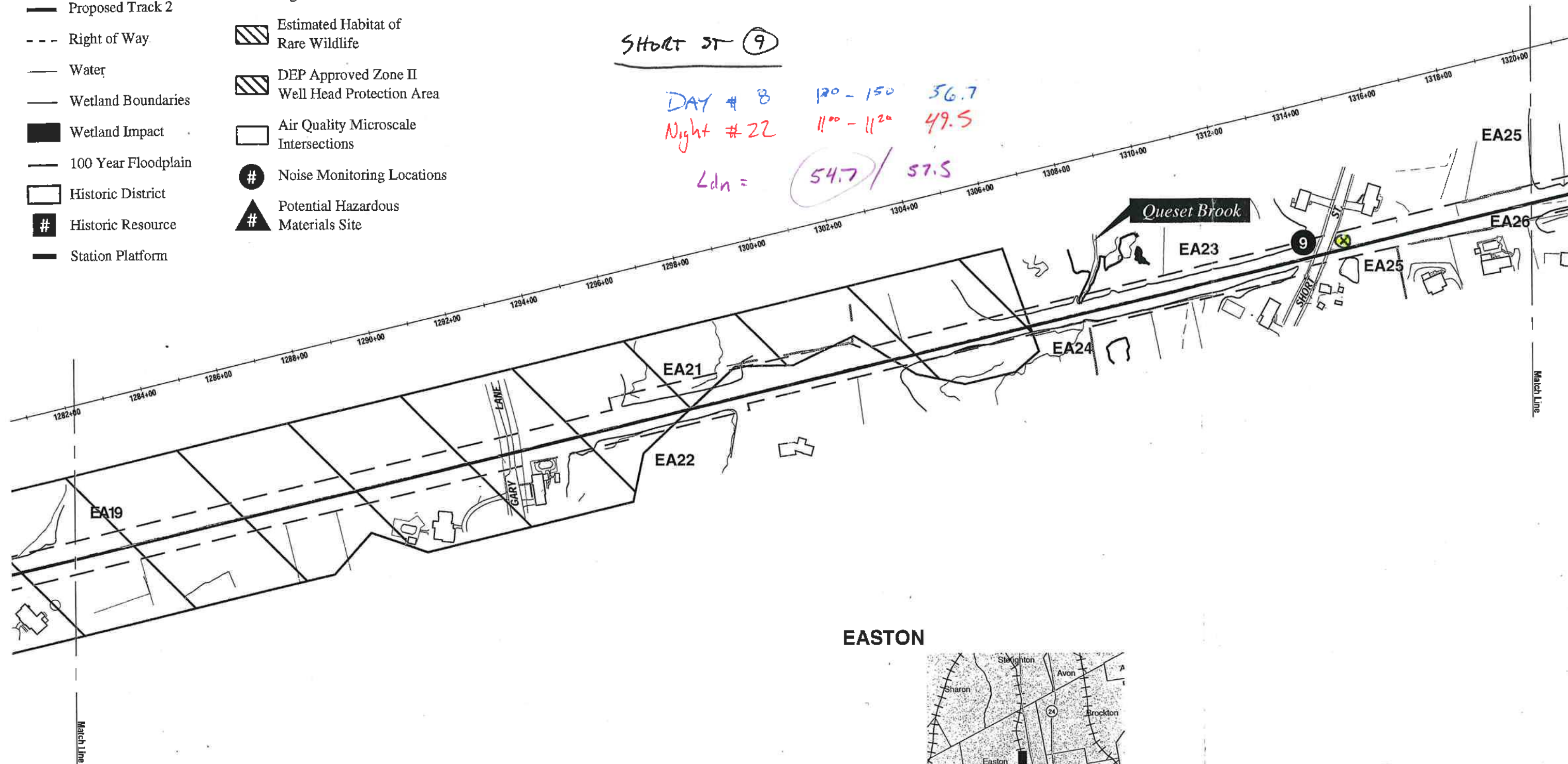
Massachusetts
Bay
Transportation
Authority

Figure 2.3-2
Stoughton Branch
Sheet 7 of 23

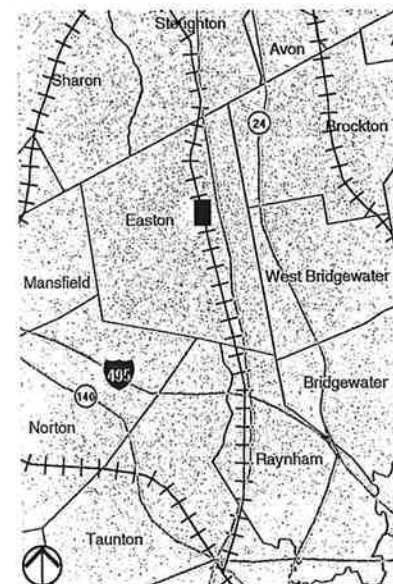
- Proposed Track 1
- Proposed Track 2
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- 100 Year Floodplain
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- ▨ DEP Approved Zone II Well Head Protection Area
- Air Quality Microscale Intersections
- # Noise Monitoring Locations
- # Potential Hazardous Materials Site

SHORT ST ⑨

DAY # 8 120 - 150 56.7
 Night # 22 11⁰⁰ - 11²⁰ 49.5
 Ldn = 54.7 / 57.5



EASTON



0 125 250 Feet

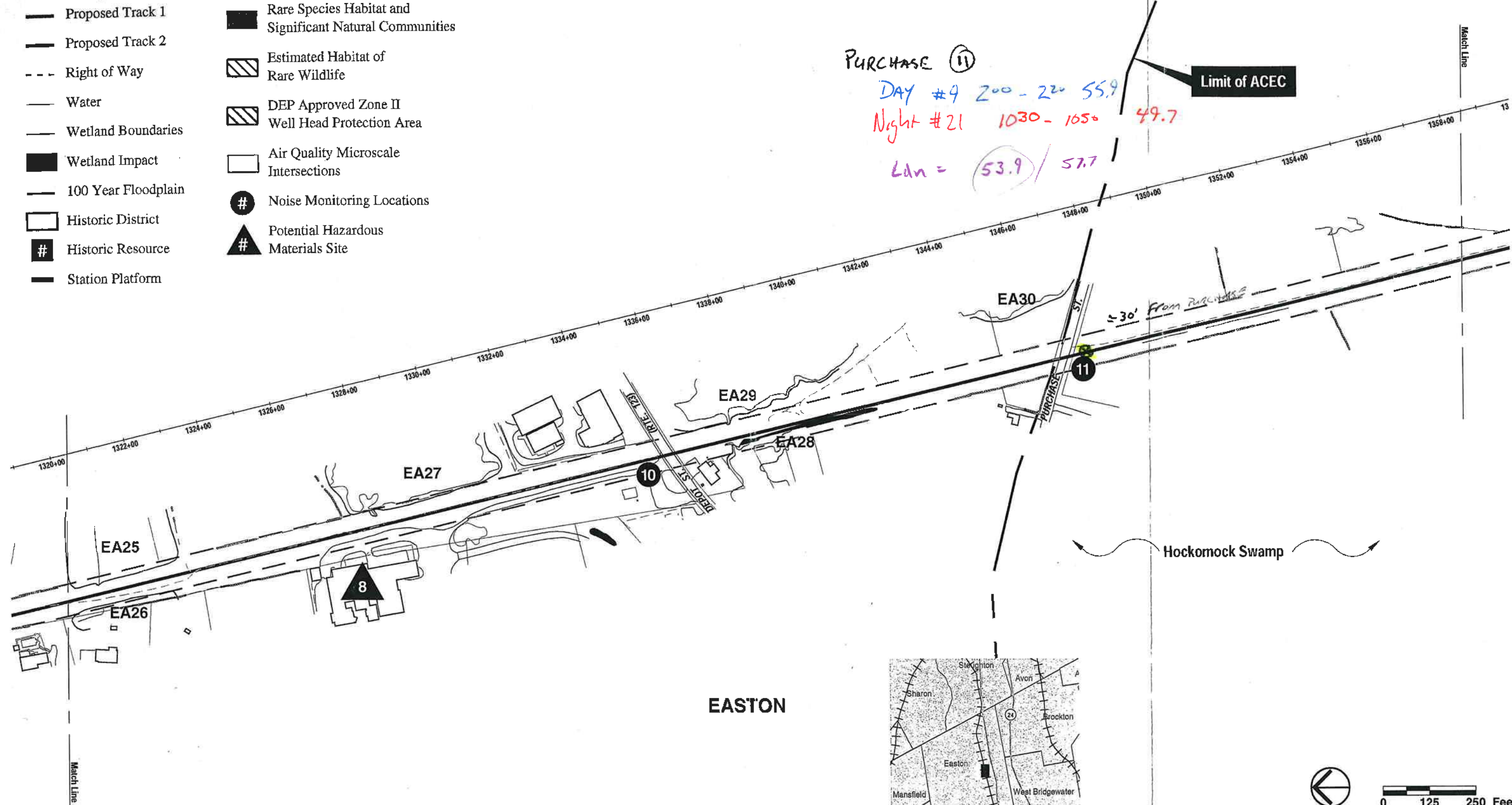
New Bedford / Fall River Commuter Rail



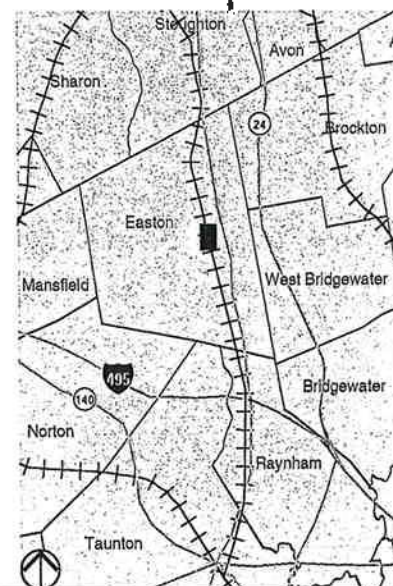
Massachusetts
 Bay
 Transportation
 Authority

Figure 2.3-2
 Stoughton Branch
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- Proposed Track 1
- Proposed Track 2
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- Water
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- # Noise Monitoring Locations
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EASTON

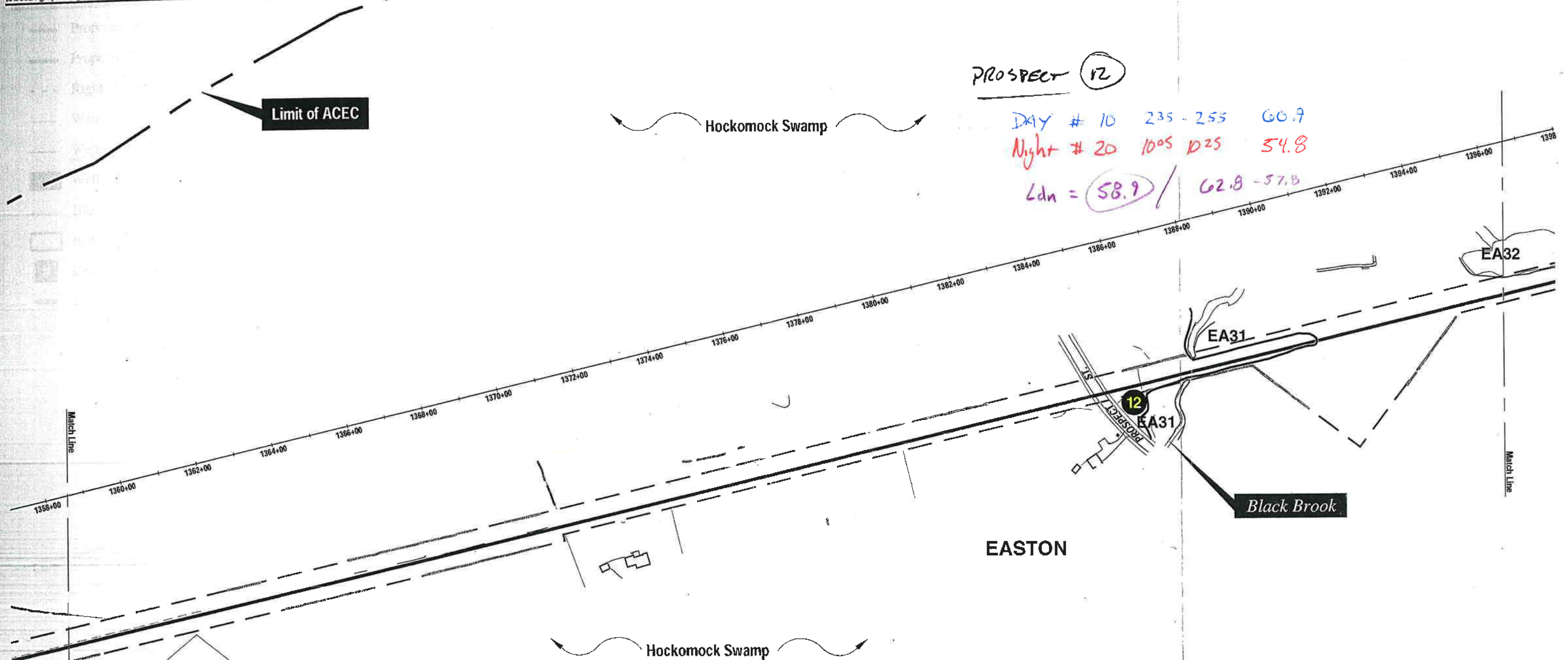


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Bay
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Authority

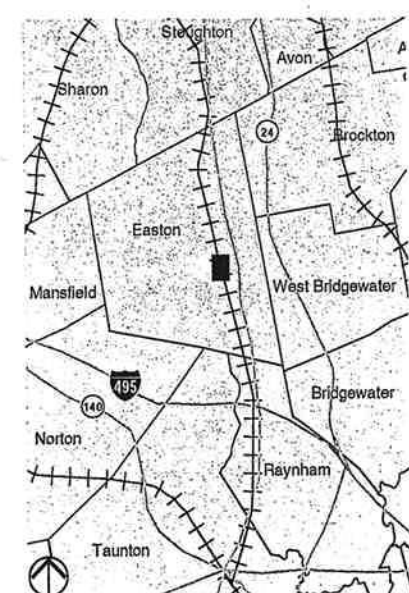
New Bedford / Fall River Commuter Rail

Figure 2.3-2

Stoughton Branch
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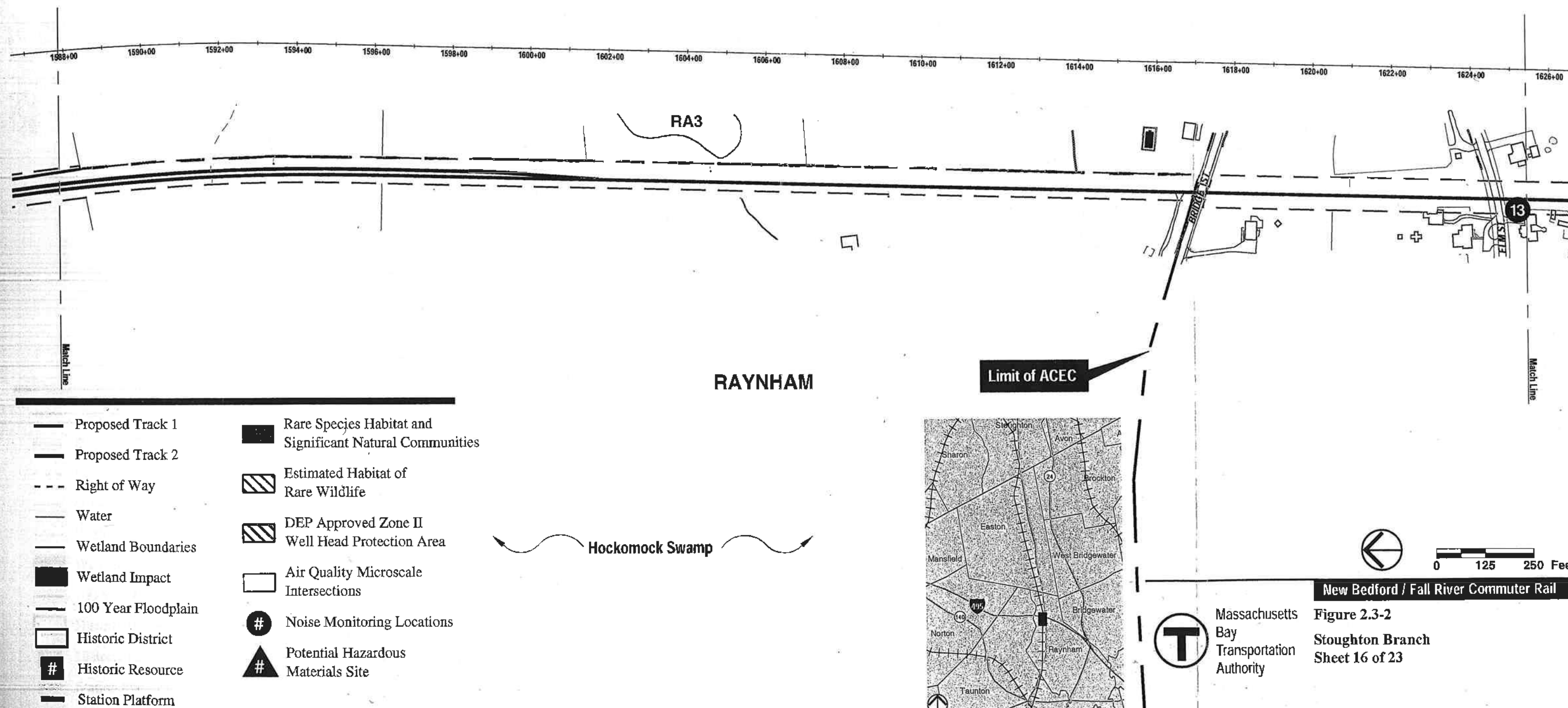
- | | |
|-----------------------|--|
| — Proposed Track 1 | ■ Rare Species Habitat and Significant Natural Communities |
| — Proposed Track 2 | ▨ Estimated Habitat of Rare Wildlife |
| - - - Right of Way | ▨ DEP Approved Zone II Well Head Protection Area |
| — Water | □ Air Quality Microscale Intersections |
| — Wetland Boundaries | ● # Noise Monitoring Locations |
| ■ Wetland Impact | ▲ # Potential Hazardous Materials Site |
| — 100 Year Floodplain | |
| □ Historic District | |
| # Historic Resource | |
| — Station Platform | |



New Bedford / Fall River Commuter Rail

Massachusetts Bay Transportation Authority

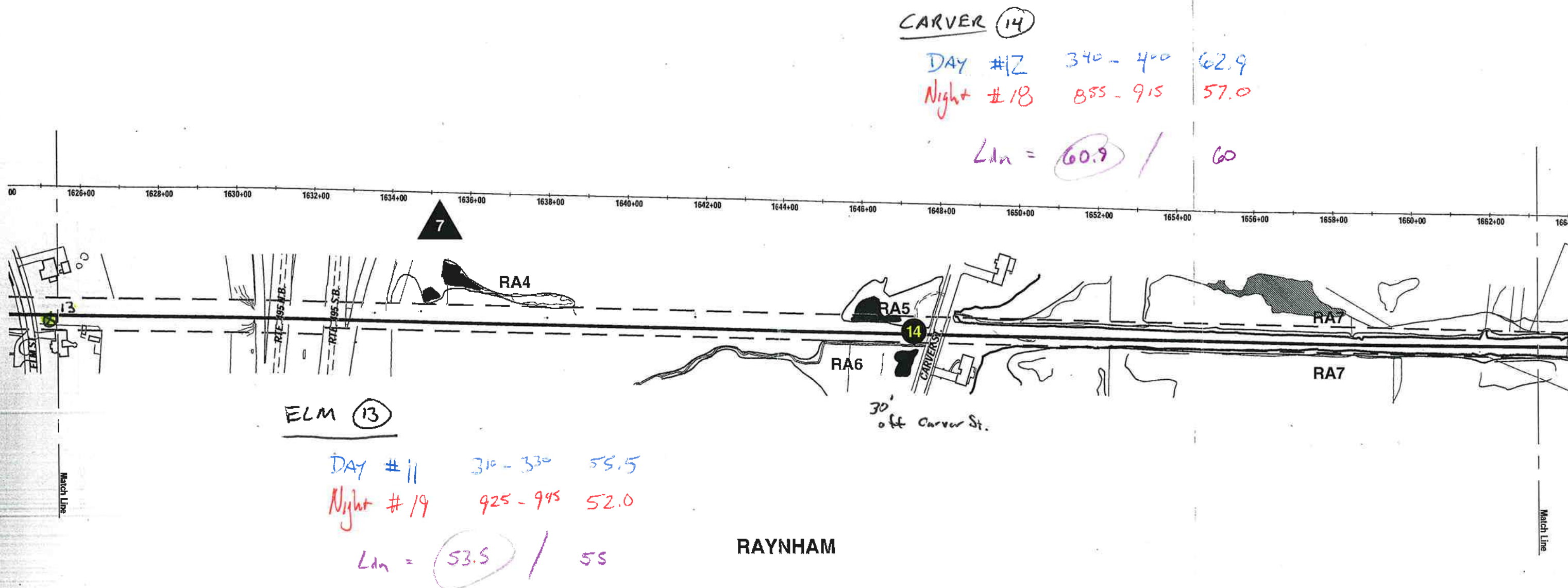
Figure 2.3-2
Stoughton Branch
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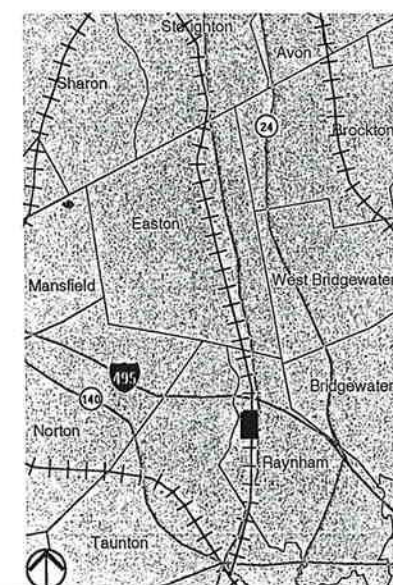
New Bedford / Fall River Commuter Rail

Figure 2.3-2

Stoughton Branch
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- | | |
|-----------------------|--|
| — Proposed Track 1 | ■ Rare Species Habitat and Significant Natural Communities |
| — Proposed Track 2 | ▨ Estimated Habitat of Rare Wildlife |
| - - - Right of Way | ▨ DEP Approved Zone II Well Head Protection Area |
| — Water | □ Air Quality Microscale Intersections |
| — Wetland Boundaries | ● # Noise Monitoring Locations |
| ■ Wetland Impact | ▲ # Potential Hazardous Materials Site |
| — 100 Year Floodplain | |
| □ Historic District | |
| # Historic Resource | |
| ■ Station Platform | |



Massachusetts
Bay
Transportation
Authority



0 125 250 Feet

New Bedford / Fall River Commuter Rail

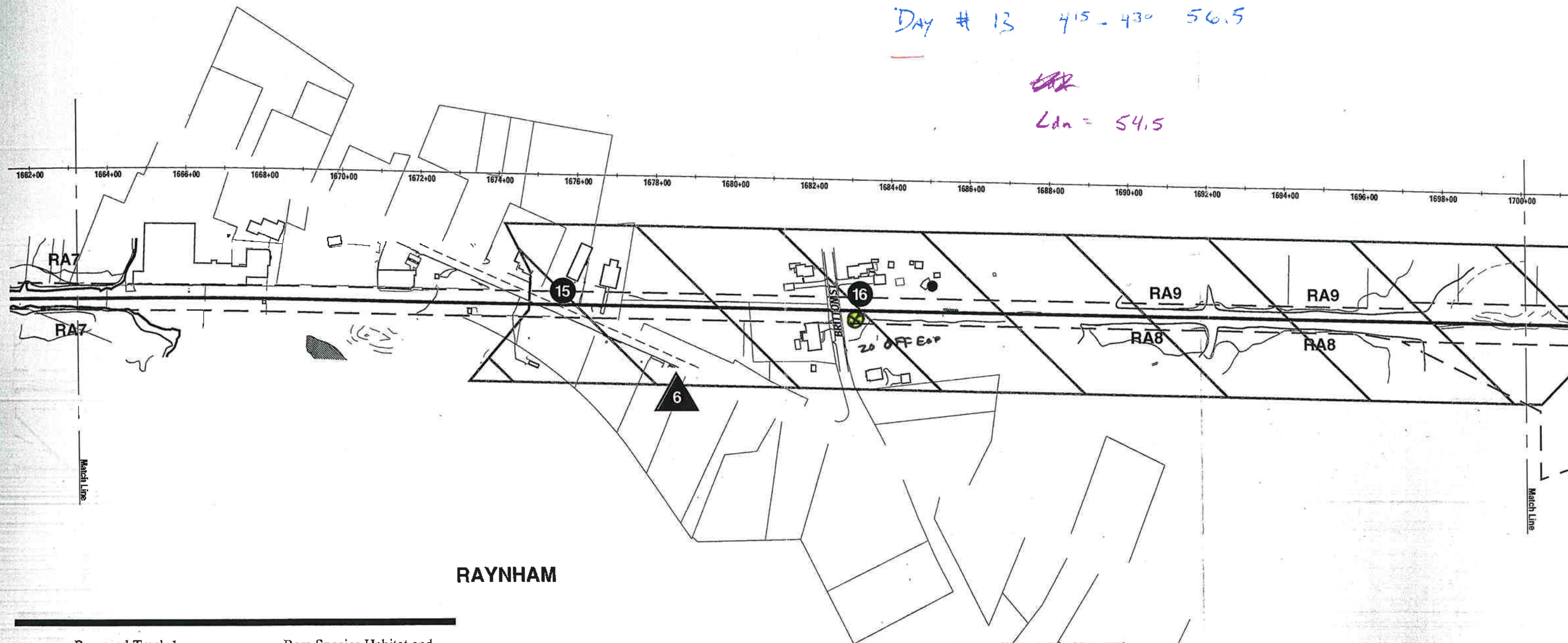
Figure 2.3-2
Stoughton Branch
Sheet 17 of 23

BRITTON ST (16)

DAY # 13 415 - 430 56.5

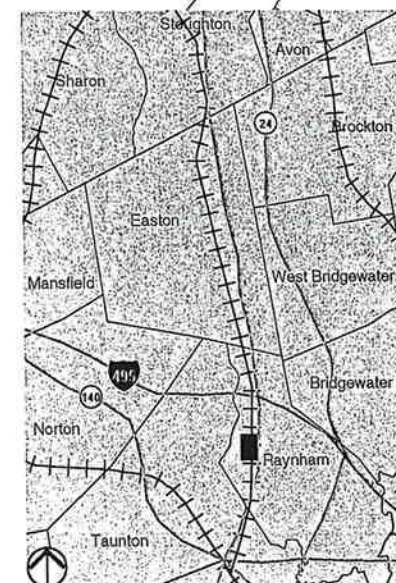
54.5

Ldn = 54.5



RAYNHAM

- | | |
|-----------------------|--|
| — Proposed Track 1 | ■ Rare Species Habitat and Significant Natural Communities |
| — Proposed Track 2 | ▨ Estimated Habitat of Rare Wildlife |
| - - - Right of Way | ▨ DEP Approved Zone II Well Head Protection Area |
| — Water | □ Air Quality Microscale Intersections |
| — Wetland Boundaries | ● Noise Monitoring Locations |
| ■ Wetland Impact | ▲ Potential Hazardous Materials Site |
| — 100 Year Floodplain | |
| □ Historic District | |
| # Historic Resource | |
| — Station Platform | |



0 125 250 Feet

New Bedford / Fall River Commuter Rail



Massachusetts
Bay
Transportation
Authority

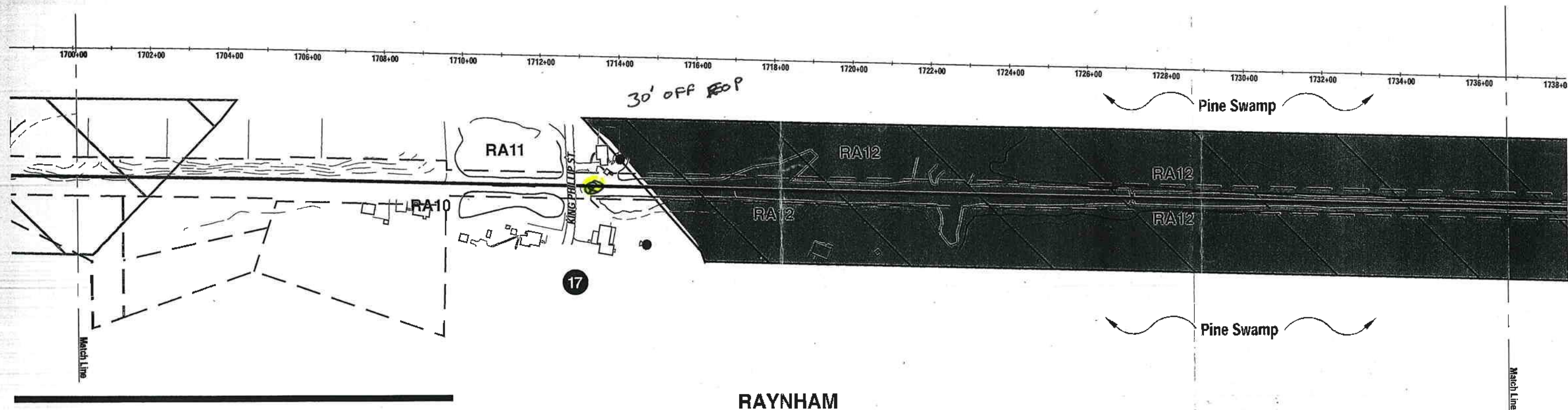
Figure 2.3-2
Stoughton Branch
Sheet 18 of 23

KING PHILLIP ①7

DAY # 14 500-515 59.3

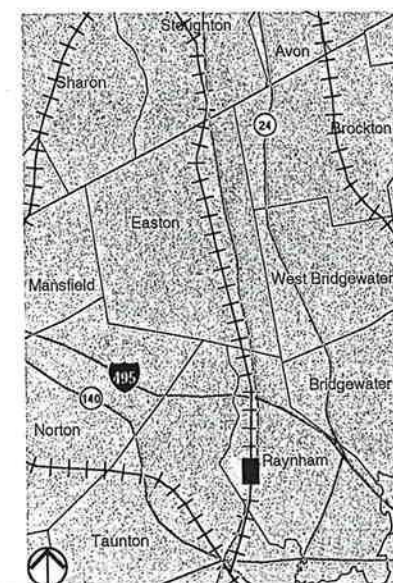
Night # 17 830-850 53.4

Ldn = 57.3 / 56.4



RAYNHAM

- | | |
|-----------------------|--|
| — Proposed Track 1 | ■ Rare Species Habitat and Significant Natural Communities |
| — Proposed Track 2 | ▨ Estimated Habitat of Rare Wildlife |
| - - - Right of Way | ▨ DEP Approved Zone II Well Head Protection Area |
| — Water | □ Air Quality Microscale Intersections |
| — Wetland Boundaries | ● Noise Monitoring Locations |
| ■ Wetland Impact | ▲ Potential Hazardous Materials Site |
| — 100 Year Floodplain | |
| □ Historic District | |
| # Historic Resource | |
| ■ Station Platform | |



0 125 250 Feet

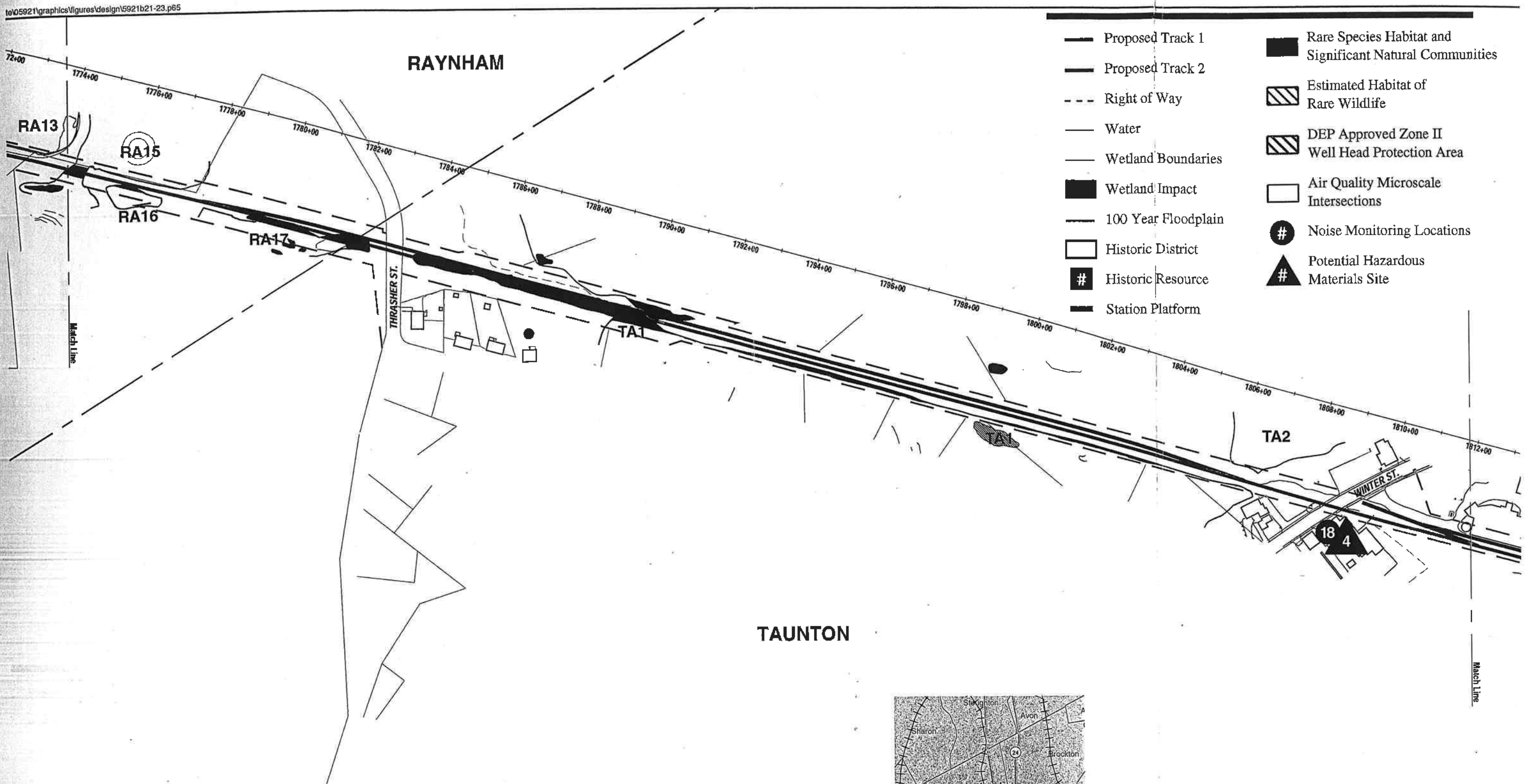
New Bedford / Fall River Commuter Rail



Massachusetts Bay Transportation Authority

Figure 2.3-2

Stoughton Branch
Sheet 19 of 23



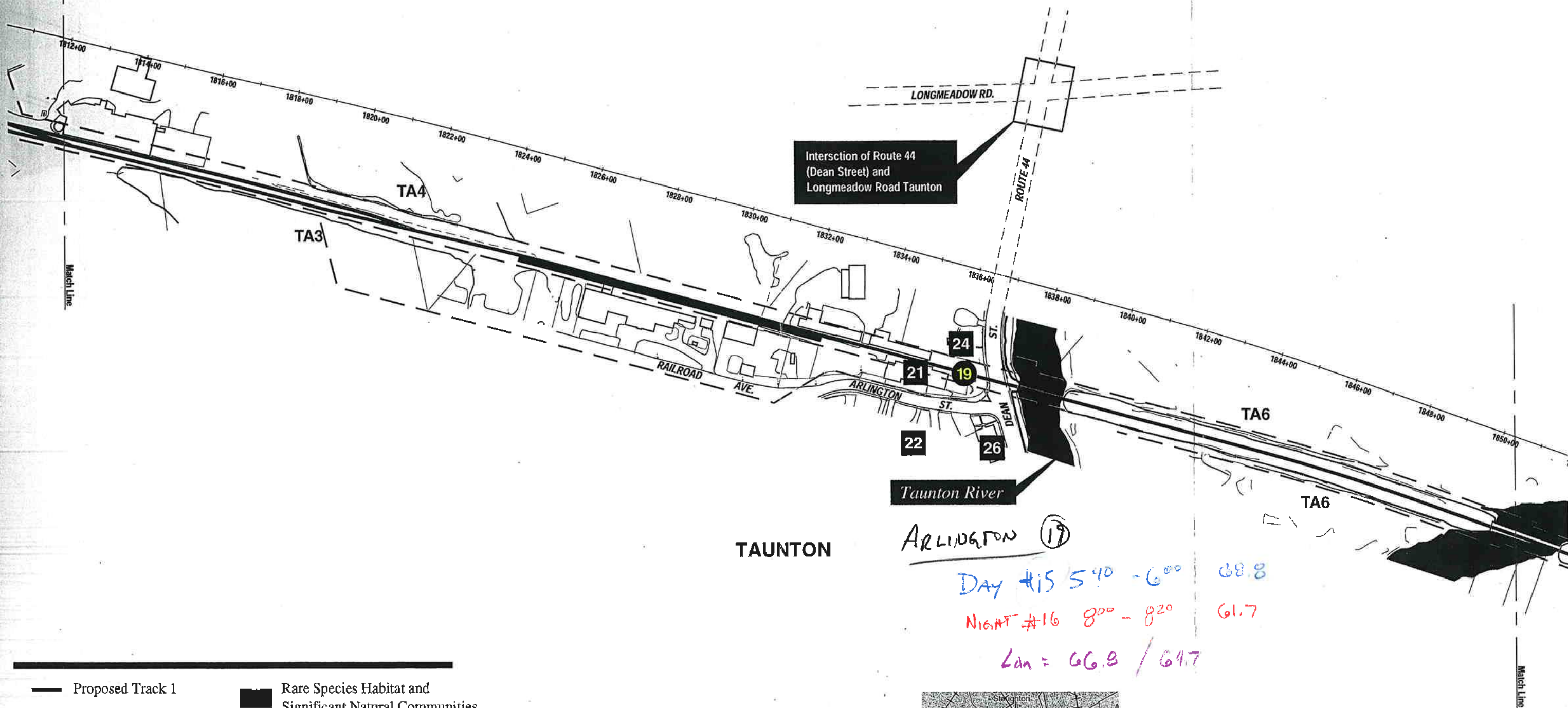
0 125 250 Feet



Massachusetts
Bay
Transportation
Authority

New Bedford / Fall River Commuter Rail

Figure 2.3-2
Stoughton Branch
Sheet 21 of 23



TAUNTON

ARLINGTON ①

DAY #15 5⁴⁰ - 6⁰⁰ 68.8
 NIGHT #16 8⁰⁰ - 8²⁰ 61.7
 Ldn = 66.8 / 64.7



- | | |
|-----------------------|--|
| — Proposed Track 1 | ■ Rare Species Habitat and Significant Natural Communities |
| — Proposed Track 2 | ▨ Estimated Habitat of Rare Wildlife |
| - - - Right of Way | ▨ DEP Approved Zone II Well Head Protection Area |
| — Water | □ Air Quality Microscale Intersections |
| — Wetland Boundaries | ● # Noise Monitoring Locations |
| ■ Wetland Impact | ▲ # Potential Hazardous Materials Site |
| — 100 Year Floodplain | |
| □ Historic District | |
| ■ Historic Resource | |
| — Station Platform | |



0 125 250 Feet



Massachusetts
Bay
Transportation
Authority

New Bedford / Fall River Commuter Rail

Figure 2.3-2
Stoughton Branch
Sheet 22 of 23

Appendix 4.6-B

Noise Impacts for the Stoughton Diesel Alternative and Whittenton Electric Alternative



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Noise and Vibration
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FTA Train Calculations



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Stoughton Diesel



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New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	65	65	3	150	8
Plain Street	4.60	59	65	100	8	200	14
Morton Street	5.20	69	70	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	68	45	0	100	10
Oliver Street	7.80	58	62	75	0	175	2
Pond Street	7.90	58	61	75	0	175	8
Main Street	8.05	63	67	55	6	135	15
Bridge Street	8.40	58	62	100	2	200	15
Short Street	9.55	64	66	55	0	135	5
Depot Street/123	10.00	65	69	45	0	100	1
Purchase Street	10.20	61	64	75	0	175	2
Prospect Street	10.90	60	66	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	63	100	4	200	3
Carver Street	15.80	60	65	100	1	200	1
Route 138	16.40	67	69	45	0	100	4
Britton Street	16.50	57	63	115	4	225	4
King Phillip Street	17.10	63	65	55	4	135	3
Longmeadow Road	18.90	67	70	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	68	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Leq (dBA)			Project	Build	Impact
		Existing Background Noise	No-Build				
Jones School	1,400						
Kimball School	1,400						
Unionville School	3,200						
Stonehill College	5,500						
Parkview School	2,300						
Easton Jr. High School	3,100						
Ames Highschool	3,100						
Holy Cross Seminary	4,000						
School building near Easton Center	1,700						
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact	
High School	3,200						
Pole School	2,000						
Summer Street School	600	65	66	51	66	No Impact	



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New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station		6.40	70	Station	Horn	1	8	2.47	0.33	1300	5					
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station		14.10	70	Station	Horn	1	8	2.47	0.33	1800	5					
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station		19.20	40	Station	Bell	1	8	2.40	0.44	600	5					
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁹(L_{eq}day/10))+(9*10⁹((L_{eq}nite+10)/10)))-13.8

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
63	63	54
62	61	52
58	58	49

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	
Dist. to receiver	distance (ft) 50	distance (ft) 50	
Daytime Hours	speed (mph) 30	speed (mph) 30	
(7 AM - 10 PM)	trains/hour 2.47	trains/hour 2.47	
	locos/train 1	cars/train 8	
Nighttime Hours	speed (mph) 30	speed (mph) 30	
(10 PM - 7 AM)	trains/hour 0.33	trains/hour 0.33	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N Y	Y/N Y	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows			
of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels						Leq					Ldn				
Milepost		Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA
1 Brock Street	4.30	G	Yes	30	75	57	58	59	61	3	60	62	63	65	3
2 Plain Street	4.60	G	Yes	30	75	61	60	61	64	4	64	58	59	65	7
3 Morton Street	5.20	G	Yes	30	100	60	67	68	69	2	63	68	69	70	2
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	59	65	66	67	2	62	66	67	68	2
5 Oliver Street	7.80	G	Yes	30	100	57	63	64	65	2	60	57	58	62	5
6 Pond Street	7.90	UG	No	30	100	56	62	63	63	2	59	57	58	61	4
7 Main Street	8.05	OH	No	40	75	61	64	65	66	3	64	62	63	67	5
8 Bridge Street	8.40	OH	No	50	75	57	58	59	61	3	60	57	58	62	5
9 Short Street	9.55	G	Yes	70	100	59	63	64	65	2	62	63	64	66	3
10 Depot Street/123	10.00	G	Yes	70	75	63	67	68	69	2	66	64	65	69	5
11 Purchase Street	10.20	G	Yes	70	300	59	60	61	63	3	62	60	61	64	4
12 Prospect Street	10.90	G	Yes	70	100	62	55	56	63	8	65	59	60	66	7
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	59	58	59	62	4	61	56	57	63	7
14 Carver Street	15.80	G	Yes	70	75	60	56	57	62	6	63	59	60	65	6
15 Route 138	16.40	G	Yes	70	75	63	65	66	68	3	65	66	67	69	3
16 Britton Street	16.50	G	Yes	70	75	59	58	59	62	4	61	56	57	63	7
17 King Phillip Street	17.10	G	Yes	70	100	59	64	65	66	2	62	62	63	65	3
18 Longmeadow Road	18.90	G	Yes	30	300	63	61	62	66	5	66	66	67	70	4
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	61	65	66	67	2	64	64	65	68	4
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



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Noise and Vibration
Draft**

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RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
60	57	52
57	55	50
56	53	49

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 125	distance (ft) 125	
Daytime Hours (7 AM - 10 PM)	speed (mph) 45 trains/hour 3 locos/train 1	speed (mph) 45 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 45 trains/hour 1 locos/train 1	speed (mph) 45 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
64	61	57
61	58	53
61	59	54

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 100	distance (ft) 100	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
63	60	55
59	57	52
60	57	52

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 125	distance (ft) 125	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
62	59	54
58	56	51
59	56	51

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 145	distance (ft) 150	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
60	57	52
56	54	49
57	54	49

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 200	distance (ft) 200	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
59	56	51
56	53	48
56	53	49

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 225	distance (ft) 225	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
64	61	57
61	58	53
61	59	54

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 100	distance (ft) 100	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
60	57	52
56	54	49
57	54	49

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 200	distance (ft) 200	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
62	59	54
58	56	51
59	56	51

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 145	distance (ft) 150	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
66	63	58
63	60	55
63	60	56

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 75	distance (ft) 75	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
62	59	54
58	56	51
59	56	51

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 145	distance (ft) 150	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
65	62	57
61	58	54
62	59	55

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 95	distance (ft) 90	
Daytime Hours	speed (mph) 70	speed (mph) 70	
(7 AM - 10 PM)	trains/hour 3	trains/hour 3	
	locos/train 1	cars/train 8	
Nighttime Hours	speed (mph) 70	speed (mph) 70	
(10 PM - 7 AM)	trains/hour 1	trains/hour 1	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows			
of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
61	59	54
58	55	51
59	56	51

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 150	distance (ft) 150	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
63	60	55
59	57	52
60	57	52

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 125	distance (ft) 125	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
65	63	58
62	59	55
63	60	55

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 81	distance (ft) 81	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
61	59	54
58	55	51
59	56	51

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 150	distance (ft) 150	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
62	59	54
58	55	51
59	56	51

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 150	distance (ft) 145	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
66	63	58
63	60	55
63	60	56

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 75	distance (ft) 75	
Daytime Hours	speed (mph) 70	speed (mph) 70	
(7 AM - 10 PM)	trains/hour 3	trains/hour 3	
	locos/train 1	cars/train 8	
Nighttime Hours	speed (mph) 70	speed (mph) 70	
(10 PM - 7 AM)	trains/hour 1	trains/hour 1	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows			
of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
64	61	57
61	58	53
61	59	54

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 100	distance (ft) 100	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



**Technical Report
Noise and Vibration
Draft**

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Technical Report
Noise and Vibration
Draft

Whittenton Electric



**Technical Report
Noise and Vibration
Draft**

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New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	#REF!	65	3	150	8
Plain Street	4.60	59	#REF!	100	8	200	14
Morton Street	5.20	69	#REF!	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	#REF!	45	0	100	10
Oliver Street	7.80	58	#REF!	75	0	175	2
Pond Street	7.90	58	#REF!	75	0	175	8
Main Street	8.05	63	#REF!	55	6	135	15
Bridge Street	8.40	58	#REF!	100	2	200	15
Short Street	9.55	64	#REF!	55	0	135	5
Depot Street/123	10.00	65	#REF!	45	0	100	1
Purchase Street	10.20	61	#REF!	75	0	175	2
Prospect Street	10.90	60	#REF!	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	#REF!	100	4	200	3
Carver Street	15.80	60	#REF!	100	1	200	1
Route 138	16.40	67	#REF!	45	0	100	4
Britton Street	16.50	57	#REF!	115	4	225	4
King Phillip Street	17.10	63	#REF!	55	4	135	3
Longmeadow Road	18.90	67	#REF!	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	#REF!	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Leq (dBA)			Project	Build	Impact
		Existing Background Noise	No-Build				
Jones School	1,400						
Kimball School	1,400						
Unionville School	3,200						
Stonehill College	5,500						
Parkview School	2,300						
Easton Jr. High School	3,100						
Ames Highschool	3,100						
Holy Cross Seminary	4,000						
School building near Easton Center	1,700						
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact	
High School	3,200						
Pole School	2,000						
Summer Street School	600	65	66	51	66	No Impact	



**Technical Report
Noise and Vibration
Draft**

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New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station																
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station																
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station																
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	600	5		2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10³(L_{eq}day/10))+(9*10³((L_{eq}nite+10)/10)))-13.8

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
63	63	54
62	61	52
58	58	49

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	
Dist. to receiver	distance (ft) 50	distance (ft) 50	
Daytime Hours	speed (mph) 30	speed (mph) 30	
(7 AM - 10 PM)	trains/hour 2.47	trains/hour 2.47	
	locos/train 1	cars/train 8	
Nighttime Hours	speed (mph) 30	speed (mph) 30	
(10 PM - 7 AM)	trains/hour 0.33	trains/hour 0.33	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N Y	Y/N Y	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows			
of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels						Leq					Ldn					
Milepost		Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1	Brock Street	4.30	G	Yes	30	75	#REF!	58	59	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
2	Plain Street	4.60	G	Yes	30	75	#REF!	60	61	#REF!	#REF!	#REF!	58	59	#REF!	#REF!
3	Morton Street	5.20	G	Yes	30	100	#REF!	67	68	#REF!	#REF!	#REF!	68	69	#REF!	#REF!
North Easton Station		6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4	Elm Street (MP 7.60)	7.60	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
5	Oliver Street	7.80	G	Yes	30	100	#REF!	63	64	#REF!	#REF!	#REF!	57	58	#REF!	#REF!
6	Pond Street	7.90	UG	No	30	100	#REF!	62	63	#REF!	#REF!	#REF!	57	58	#REF!	#REF!
7	Main Street	8.05	OH	No	40	75	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
8	Bridge Street	8.40	OH	No	50	75	#REF!	58	59	#REF!	#REF!	#REF!	57	58	#REF!	#REF!
9	Short Street	9.55	G	Yes	70	100	#REF!	63	64	#REF!	#REF!	#REF!	63	64	#REF!	#REF!
10	Depot Street/123	10.00	G	Yes	70	75	#REF!	67	68	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
11	Purchase Street	10.20	G	Yes	70	300	#REF!	60	61	#REF!	#REF!	#REF!	60	61	#REF!	#REF!
12	Prospect Street	10.90	G	Yes	70	100	#REF!	55	56	#REF!	#REF!	#REF!	59	60	#REF!	#REF!
Raynham Station		14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13	Elm Street (MP 15.40)	15.40	G	Yes	70	100	#REF!	58	59	#REF!	#REF!	#REF!	56	57	#REF!	#REF!
14	Carver Street	15.80	G	Yes	70	75	#REF!	56	57	#REF!	#REF!	#REF!	59	60	#REF!	#REF!
15	Route 138	16.40	G	Yes	70	75	#REF!	65	66	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
16	Britton Street	16.50	G	Yes	70	75	#REF!	58	59	#REF!	#REF!	#REF!	56	57	#REF!	#REF!
17	King Phillip Street	17.10	G	Yes	70	100	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
18	Longmeadow Road	18.90	G	Yes	30	300	#REF!	61	62	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
Dean Street Station		19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19	Dean Street	19.40	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
20	Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21	Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown			G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



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RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
61	58	53
57	54	49
59	56	51

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 125	distance (ft) 125	
Daytime Hours (7 AM - 10 PM)	speed (mph) 60 trains/hour 3 locos/train 1	speed (mph) 60 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 60 trains/hour 1 locos/train 1	speed (mph) 60 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
61	58	53
57	54	49
59	56	51

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 125	distance (ft) 125	
Daytime Hours (7 AM - 10 PM)	speed (mph) 60 trains/hour 3 locos/train 1	speed (mph) 60 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 60 trains/hour 1 locos/train 1	speed (mph) 60 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
66	64	59
64	61	56
63	60	56

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 30	distance (ft) 30	
Daytime Hours (7 AM - 10 PM)	speed (mph) 35 trains/hour 3 locos/train 1	speed (mph) 35 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 35 trains/hour 1 locos/train 1	speed (mph) 35 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
61	59	54
59	56	52
57	55	50

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 55	distance (ft) 60	
Daytime Hours (7 AM - 10 PM)	speed (mph) 30 trains/hour 3 locos/train 1	speed (mph) 30 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 30 trains/hour 1 locos/train 1	speed (mph) 30 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
61	59	54
59	56	52
58	55	50

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 55	distance (ft) 56	
Daytime Hours (7 AM - 10 PM)	speed (mph) 30 trains/hour 3 locos/train 1	speed (mph) 30 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 30 trains/hour 1 locos/train 1	speed (mph) 30 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
59	56	51
54	52	47
57	54	49

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 200	distance (ft) 200	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
61	58	53
56	53	49
59	56	51

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 150	distance (ft) 150	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
59	56	51
54	52	47
57	54	49

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 200	distance (ft) 200	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
66	63	58
61	58	53
64	61	56

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 72	distance (ft) 70	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70 trains/hour 3 locos/train 1	speed (mph) 70 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70 trains/hour 1 locos/train 1	speed (mph) 70 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
66	63	58
62	59	54
64	61	56

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 50	distance (ft) 45	
Daytime Hours (7 AM - 10 PM)	speed (mph) 50 trains/hour 3 locos/train 1	speed (mph) 50 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 50 trains/hour 1 locos/train 1	speed (mph) 50 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
62	60	55
59	56	51
60	57	52

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 80	distance (ft) 80	
Daytime Hours (7 AM - 10 PM)	speed (mph) 50 trains/hour 3 locos/train 1	speed (mph) 50 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 50 trains/hour 1 locos/train 1	speed (mph) 50 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source

All Sources

Source 1

Source 2

Source 3

Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
66	63	58
62	59	55
63	60	55

Enter noise receiver land use category below.

LAND USE CATEGORY

Noise receiver land use category (1, 2 or 3)

2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 48	distance (ft) 50	
Daytime Hours (7 AM - 10 PM)	speed (mph) 50 trains/hour 3 locos/train 1	speed (mph) 50 trains/hour 3 cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 50 trains/hour 1 locos/train 1	speed (mph) 50 trains/hour 1 cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST

Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

Appendix 4.6-C

Updated Noise Impacts and Mitigation for the Stoughton Electric Alternative

■

Appendix A

Noise and Vibration Tables

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Sound Level Results and Mitigation Table

Residence ID	Street	Town	Station #	Side of Track	Land Use	Noise Exposure (dBA)		FTA Criteria, L _{dn} (dBA)	
						Existing	Project plus existing	Severe Impact	Cost Justified
	Brock Street	STOUGHTON	1011+69.99	E	residential	50	69	60	\$30,000
1411									
	Plain Street		1039+22.08	E	residential	61	66	64	\$10,000
1370			1035+49.67	E	residential	61	68	64	\$20,000
1375			1032+32.91	E	residential	61	69	64	\$25,000
1378			1030+85.95	E	residential	61	71	64	\$30,000
1381			1028+81.08	E	residential	61	66	64	\$10,000
1385			1027+96.37	E	residential	61	69	64	\$25,000
1388			1027+04.03	E	residential	61	68	64	\$20,000
1390			1026+33.91	E	residential	61	69	64	\$25,000
1391			1025+54.07	E	residential	61	69	64	\$25,000
1393			1024+67.80	E	residential	61	69	64	\$25,000
1396			1023+80.72	E	residential	61	68	64	\$20,000
1398			1022+75.46	E	residential	61	67	64	\$15,000
1400									
	Morton		1111+38.89	E	residential	59	69	63	\$30,000
1342			1074+93.11	E	residential	59	65	63	\$10,000
1348			1068+17.56	E	residential	59	66	63	\$15,000
1350			1063+52.41	E	residential	59	67	63	\$20,000
1352			1060+19.23	E	residential	59	65	63	\$10,000
1355			1054+00.29	E	residential	59	64	63	\$5,000
1358			1053+81.93	E	residential	59	70	63	\$30,000
1359			1052+16.85	E	residential	59	69	63	\$30,000
1361									
	Rolling Green		2522+72.88	W	residential	47	61	59	\$10,000
615			2520+14.94	W	residential	47	61	59	\$10,000
617			2515+68.58	W	residential	47	62	59	\$15,000
621			2498+25.43	W	residential	47	60	59	\$5,000
638			2497+36.24	E	residential	47	63	59	\$20,000
644			2496+26.41	E	residential	47	63	59	\$20,000
649			2495+14.66	W	residential	47	64	59	\$25,000
653			2494+10.41	E	residential	47	64	59	\$25,000
657			2493+03.55	W	residential	47	64	59	\$25,000
662			2492+01.86	W	residential	47	64	59	\$25,000
663			2491+03.55	E	residential	47	65	59	\$30,000
667			2488+95.68	E	residential	47	60	59	\$5,000
669			2489+93.19	E	residential	47	64	59	\$25,000
670									
	North Main		2626+20.83	E	residential	60	65	63	\$10,000
539			2622+67.48	E	residential	60	66	63	\$15,000
542			2581+91.45	E	residential	60	68	63	\$25,000
572			2580+39.63	W	residential	60	67	63	\$20,000
576			2579+23.88	E	residential	60	66	63	\$15,000
580			2575+47.67	E	residential	60	65	63	\$10,000
585									
	Cory	FALL RIVER	2696+85.10	E	residential	55	66	61	Noise Barrier
337			2696+52.71	E	residential	55	64	61	Noise Barrier
338			2695+82.80	E	residential	55	65	61	Noise Barrier
342			2694+40.05	E	residential	55	64	61	Noise Barrier
349			2694+49.08	W	residential	55	66	61	Noise Barrier
351			2694+88.28	W	residential	55	69	61	\$30,000
353			2694+99.78	E	residential	55	65	61	\$20,000
354			2694+56.03	E	residential	55	65	61	\$20,000
357			2694+18.21	W	residential	55	64	61	\$15,000
361			2693+11.69	W	residential	55	64	61	Noise Barrier
362			2693+73.66	W	residential	55	64	61	\$15,000
364			2692+35.38	W	residential	55	65	61	Noise Barrier
366			2692+93.10	W	residential	55	67	61	\$30,000
369			2691+10.57	W	residential	55	64	61	Noise Barrier
375			2690+51.95	W	residential	55	64	61	Noise Barrier
380			2689+93.69	W	residential	55	65	61	Noise Barrier
387			2689+47.81	E	residential	55	65	61	Noise Barrier
392			2688+99.83	W	residential	55	65	61	Noise Barrier
394			2688+51.40	W	residential	55	65	61	Noise Barrier
401			2687+99.43	W	residential	55	65	61	Noise Barrier
406			2687+45.15	W	residential	55	67	61	Noise Barrier
410			2687+71.81	W	residential	55	64	61	Noise Barrier
411			2686+77.01	W	residential	55	70	61	Noise Barrier
414			2686+83.02	W	residential	55	65	61	Noise Barrier
415			2686+42.76	W	residential	55	65	61	Noise Barrier
417			2685+76.51	W	residential	55	68	61	Noise Barrier
419			2685+17.54	W	residential	55	66	61	Noise Barrier
422			2684+36.31	E	residential	55	68	61	Noise Barrier
425			2684+50.57	W	residential	55	64	61	Noise Barrier
427			2683+66.53	W	residential	55	64	61	Noise Barrier
431			2683+17.23	W	residential	55	63	61	Noise Barrier
434			2681+96.84	W	residential	55	68	61	Noise Barrier
437			2681+14.24	W	residential	55	67	61	Noise Barrier
441			2679+82.06	W	residential	55	65	61	Noise Barrier
447			2679+36.85	W	residential	55	63	61	Noise Barrier
450			2678+94.31	W	residential	55	63	61	Noise Barrier
453			2671+88.12	W	residential	55	65	61	\$20,000
472			2670+19.00	E	residential	55	65	61	\$20,000
477			2668+82.31	E	residential	55	65	61	\$20,000
479			2668+06.69	E	residential	55	65	61	\$20,000
482									

Residence ID	Street	Town	Station #	Side of Track	Land Use	Noise Exposure (dBA)		FTA Criteria, L _{dn} (dBA)	
						Existing	Project plus existing	Severe Impact	Cost Justified
485			2667+13.50	E	residential	55	65	61	\$20,000
492			2666+11.62	W	residential	55	66	61	\$25,000
493			2665+36.30	E	residential	55	65	61	\$20,000
495			2666+26.29	W	residential	55	64	61	\$15,000
498			2664+04.97	W	residential	55	65	61	\$20,000
513			2654+82.92	W	residential	55	70	61	\$30,000
516			2653+51.76	E	residential	55	64	61	\$15,000
524			2651+03.61	W	residential	55	63	61	\$10,000
525			2649+65.96	W	residential	55	65	61	\$20,000
526			2649+13.41	W	residential	55	64	61	\$15,000
529			2648+64.25	W	residential	55	64	61	\$15,000
530			2648+09.82	W	residential	55	64	61	\$15,000
531			2647+58.16	W	residential	55	64	61	\$15,000
533			2646+73.80	E	residential	55	66	61	\$25,000
535			2646+19.75	W	residential	55	65	61	\$20,000
	Durfee								
129			2796+92.97	W	residential	55	66	61	\$25,000
133			2795+12.69	W	residential	55	62	61	\$5,000
135			2794+66.09	W	residential	55	63	61	\$10,000
136			2796+64.26	E	residential	55	66	61	\$25,000
137			2794+07.49	E	residential	55	62	61	\$5,000
143			2793+33.46	W	residential	55	64	61	\$15,000
144			2794+99.03	W	residential	55	67	61	\$30,000
151			2792+02.13	W	residential	55	64	61	\$15,000
156			2791+23.91	W	residential	55	64	61	\$15,000
157			2790+89.04	W	residential	55	64	61	\$15,000
159			2790+49.38	E	residential	55	63	61	\$10,000
163			2790+00.32	W	residential	55	64	61	\$15,000
166			2789+60.37	W	residential	55	63	61	\$10,000
169			2793+17.52	W	residential	55	63	61	\$10,000
170			2788+50.25	W	residential	55	63	61	\$10,000
172			2787+40.94	W	residential	55	63	61	\$10,000
176			2792+07.58	W	residential	55	63	61	\$10,000
179			2791+16.09	W	residential	55	64	61	\$15,000
184			2790+12.93	W	residential	55	64	61	\$15,000
186			2782+91.68	W	residential	55	64	61	\$15,000
188			2789+20.14	W	residential	55	64	61	\$15,000
190			2787+59.74	E	residential	55	65	61	\$20,000
191			2780+60.53	E	residential	55	65	61	\$20,000
192			2779+68.90	E	residential	55	64	61	\$15,000
193			2778+99.23	E	residential	55	63	61	\$10,000
196			2778+22.37	E	residential	55	64	61	\$15,000
197			2777+39.18	E	residential	55	63	61	\$10,000
199			2785+62.30	E	residential	55	63	61	\$10,000
200			2784+61.91	E	residential	55	65	61	\$20,000
264			2740+73.91	E	residential	55	67	61	\$30,000
284			2724+80.05	W	residential	55	63	61	\$10,000
285			2724+88.89	E	residential	55	69	61	\$30,000
296			2721+20.92	W	residential	55	63	61	\$10,000
299			2720+74.83	W	residential	55	63	61	\$10,000
301			2720+37.05	W	residential	55	63	61	\$10,000
316			2711+33.88	E	residential	55	63	61	\$10,000
323			2705+69.17	E	residential	55	66	61	\$25,000
327			2704+81.36	E	residential	55	65	61	\$20,000
330			2703+57.22	E	residential	55	65	61	\$20,000
	Worcester								
41		N	2739+89.47	E	residential	55	62	61	\$5,000
44		E	2738+87.11	E	residential	55	63	61	\$10,000
45		W	2737+86.94	W	residential	55	62	61	\$5,000
49			2736+81.02	W	residential	55	62	61	\$5,000
51		B	2736+30.99	W	residential	55	62	61	\$5,000
54		E	2735+61.75	W	residential	55	62	61	\$5,000
98		D	2722+56.24	W	residential	55	65	61	\$20,000
100		F	2722+58.73	E	residential	55	63	61	\$10,000
104		O	2721+25.94	W	residential	55	65	61	\$20,000
105		R	2721+30.16	E	residential	55	62	61	\$5,000
	Earle & Davis	D							
15			2803+37.43	E	residential	56	63	61	\$10,000
	Bridge								
1083			1246+26.55	E	residential	52	63	60	\$15,000
1096			1242+08.25	E	residential	52	66	60	Noise Barrier
1099			1241+77.99	E	residential	52	61	60	Noise Barrier
1102			1241+12.00	W	residential	52	61	60	Noise Barrier
1107			1240+04.07	E	residential	52	66	60	Noise Barrier
1108		E	1240+13.01	E	residential	52	61	60	Noise Barrier
1110		A	1239+37.40	E	residential	52	67	60	Noise Barrier
1113		S	1239+21.89	E	residential	52	61	60	Noise Barrier
1117		T	1238+55.88	E	residential	52	61	60	Noise Barrier
1118		O	1238+15.17	E	residential	52	66	60	Noise Barrier
1120		N	1237+71.27	E	residential	52	66	60	Noise Barrier
1122			1237+87.31	E	residential	52	61	60	Noise Barrier
1124			1237+22.83	E	residential	52	66	60	Noise Barrier
1129			1236+53.19	E	residential	52	66	60	Noise Barrier
1132			1236+44.39	E	residential	52	61	60	Noise Barrier
1134			1235+47.14	E	residential	52	61	60	Noise Barrier
1135			1235+13.15	E	residential	52	65	60	Noise Barrier

						Noise Exposure (dBA)		FTA Criteria, L _{dn} (dBA)		
Residence ID	Street	Town	Station #	Side of Track	Land Use	Project plus existing		Severe Impact	Cost Justified	
						Existing				
1140		E A S T O N	1234+21.46	E	residential	52	65	60	Noise Barrier	
1143			1233+72.46	E	residential	52	61	60	Noise Barrier	
1145			1232+89.39	E	residential	52	66	60	Noise Barrier	
1147			1232+56.16	E	residential	52	61	60	Noise Barrier	
1148			1231+76.18	E	residential	52	66	60	Noise Barrier	
1149			1230+91.06	E	residential	52	62	60	\$10,000	
1152			1230+29.14	E	residential	52	62	60	\$10,000	
1153			1230+76.25	E	residential	52	65	60	Noise Barrier	
1155			1229+61.34	E	residential	52	62	60	\$10,000	
1156			1230+42.36	E	residential	52	61	60	Noise Barrier	
1157			1228+89.02	E	residential	52	62	60	\$10,000	
1158			1229+54.86	E	residential	52	66	60	Noise Barrier	
1161			1227+72.34	E	residential	52	62	60	Noise Barrier	
1163			1227+79.29	E	residential	52	67	60	Noise Barrier	
1164			1227+86.53	E	residential	52	65	60	\$25,000	
1166			1226+97.84	E	residential	52	62	60	Noise Barrier	
1171			1227+00.54	E	residential	52	64	60	\$20,000	
1172			1226+20.85	E	residential	52	62	60	Noise Barrier	
1173			1225+62.66	E	residential	52	62	60	Noise Barrier	
1177			1226+07.89	E	residential	52	63	60	\$15,000	
1178			1224+95.69	E	residential	52	62	60	Noise Barrier	
1179			1225+24.13	E	residential	52	68	60	Noise Barrier	
1182			1223+98.34	E	residential	52	62	60	Noise Barrier	
1183			1224+79.98	E	residential	52	63	60	\$15,000	
1187			1223+45.00	E	residential	52	62	60	Noise Barrier	
1189			1223+82.90	E	residential	52	67	60	\$30,000	
1190			1222+93.40	E	residential	52	62	60	Noise Barrier	
1191			1223+75.90	E	residential	52	63	60	\$15,000	
1192			1223+79.45	E	residential	52	62	60	\$10,000	
1197			1222+34.82	E	residential	52	62	60	Noise Barrier	
1200			1222+65.00	E	residential	52	62	60	\$10,000	
1203			1221+41.00	E	residential	52	63	60	Noise Barrier	
1208			1220+78.71	E	residential	52	65	60	Noise Barrier	
1211			1220+06.04	E	residential	52	63	60	Noise Barrier	
1217			1219+39.72	E	residential	52	64	60	Noise Barrier	
Depot/Route 123										
1046				1315+51.08	W	residential	65	69	66	\$15,000
Elm										
1272				1192+34.33	E	residential	57	64	62	\$10,000
1279				1190+12.74	E	residential	57	67	62	\$25,000
1281				1189+16.79	E	residential	57	66	62	\$20,000
1284				1188+57.55	E	residential	57	65	62	\$15,000
1286				1188+16.24	E	residential	57	64	62	\$10,000
1289				1188+01.66	E	residential	57	64	62	\$10,000
1293			1187+15.89	E	residential	57	66	62	\$20,000	
1294			1187+36.10	E	residential	57	64	62	\$10,000	
1298			1186+69.40	E	residential	57	64	62	\$10,000	
1305			1185+87.38	E	residential	57	67	62	\$25,000	
1307			1184+67.02	E	residential	57	66	62	\$20,000	
1310			1182+31.72	E	residential	57	64	62	\$10,000	
1316			1180+67.57	E	residential	57	65	62	\$15,000	
1317			1179+98.38	E	residential	57	67	62	\$25,000	
1318			1179+22.47	E	residential	57	64	62	\$10,000	
1319			1179+12.79	E	residential	57	64	62	\$10,000	
1326			1168+15.52	E	residential	57	67	62	\$25,000	
Main										
1220			1217+75.89	E	residential	62	67	64	Noise Barrier	
1223			1218+71.82	E	residential	62	67	64	Noise Barrier	
1225			1216+72.39	E	residential	62	68	64	Noise Barrier	
1228			1215+45.44	E	residential	62	69	64	Noise Barrier	
1229			1214+75.86	E	residential	62	69	64	Noise Barrier	
1231			1213+88.37	E	residential	62	69	64	Noise Barrier	
1233			1212+90.09	E	residential	62	69	64	Noise Barrier	
1236			1211+25.46	W	residential	62	71	64	\$30,000	
1238			1210+41.01	E	residential	62	67	64	\$15,000	
1239			1209+64.15	W	residential	62	71	64	\$30,000	
1240			1209+12.91	W	residential	62	67	64	\$15,000	
Oliver										
1259			1197+12.74	E	residential	52	62	60	\$10,000	
1260			1197+07.39	E	residential	52	64	60	\$20,000	
1263			1196+66.08	E	residential	52	64	60	\$20,000	
1265			1196+56.11	E	residential	52	61	60	\$5,000	
Pond										
1243			1207+21.36	E	residential	47	60	59	\$5,000	
1245			1206+67.29	W	residential	47	62	59	\$15,000	
1250			1205+45.89	E	residential	47	60	59	\$5,000	
Purchase										
1025			1353+50.72	W	residential	58	65	62	\$15,000	
1026			1350+89.64	W	residential	58	65	62	\$15,000	
1029			1347+12.40	W	residential	58	65	62	\$15,000	
1041			1327+52.01	W	residential	58	64	62	\$10,000	
Short										
1049			1298+66.67	E	residential	58	64	62	\$10,000	
1051			1296+84.36	E	residential	58	65	62	\$15,000	
1052			1295+06.98	E	residential	58	64	62	\$10,000	
1055			1293+98.00	E	residential	58	67	62	\$25,000	

						Noise Exposure (dBA)		FTA Criteria, L _{dn} (dBA)		
Residence ID	Street	Town	Station #	Side of Track	Land Use	Existing	Project plus existing	Severe Impact	Cost Justified	
1059		EASTON	1292+38.22	W	residential	58	68	62	\$30,000	
1060			1292+30.41	W	residential	58	65	62	\$15,000	
1061			1290+84.52	E	residential	58	66	62	\$20,000	
1065			1278+20.37	E	residential	58	64	62	\$10,000	
1067			1272+43.55	W	residential	58	63	62	\$5,000	
1068			1269+08.23	W	residential	58	64	62	\$10,000	
1070			1258+30.61	E	residential	58	65	62	\$15,000	
1073			1253+57.04	E	residential	58	67	62	\$25,000	
Britton		RITCHIE								
973			1661+17.85	E	residential	55	64	61	\$15,000	
974			1660+76.45	E	residential	55	65	61	\$20,000	
976			1660+48.35	E	residential	55	63	61	\$10,000	
978			1659+94.36	E	residential	55	62	61	\$5,000	
979			1659+51.74	E	residential	55	68	61	\$30,000	
980			1659+20.05	E	residential	55	66	61	\$25,000	
Carver										
992			1626+14.42	W	residential	60	66	63	\$15,000	
Elm										
995			1605+68.60	W	residential	55	65	61	\$20,000	
999			1603+08.32	W	residential	55	68	61	\$30,000	
1001			1602+74.68	W	residential	55	65	61	\$20,000	
1007			1601+55.78	W	residential	55	63	61	\$10,000	
1008			1601+46.03	W	residential	55	67	61	\$30,000	
1009			1595+92.16	W	residential	55	66	61	\$25,000	
1013			1594+32.86	W	residential	55	64	61	\$15,000	
1018			1585+92.34	W	residential	55	64	61	\$15,000	
King Phillip										
938		1696+78.76	E	residential	56	64	62	\$10,000		
946		1691+16.91	W	residential	56	66	62	\$20,000		
947		1691+16.05	E	residential	56	65	62	\$15,000		
951		1689+33.92	E	residential	56	65	62	\$15,000		
954		1686+52.89	E	residential	56	69	62	\$30,000		
958		1684+31.23	E	residential	56	65	62	\$15,000		
961		1682+67.13	E	residential	56	66	62	\$20,000		
963		1679+60.91	E	residential	56	66	62	\$20,000		
Dean		TAYLOR								
896			1845+71.10	E	residential	65	69	66	\$15,000	
898			1839+78.92	E	residential	65	69	66	\$15,000	
899			1839+17.11	W	residential	65	70	66	\$20,000	
902			1838+28.55	W	residential	65	70	66	\$20,000	
904			1836+67.41	E	residential	65	69	66	\$15,000	
906			1812+81.62	E	residential	65	70	66	\$20,000	
Hart										
864			1903+77.64	W	residential	63	68	65	\$15,000	
870			1901+36.10	W	residential	63	69	65	\$20,000	
871			1899+96.58	E	residential	63	68	65	\$15,000	
873			1900+17.92	E	residential	63	69	65	\$20,000	
Ingell										
878			1872+05.34	W	residential	57	64	62	\$10,000	
883			1870+37.80	W	residential	57	65	62	\$15,000	
Longmeadow										
914			1783+99.15	E	residential	59	70	63	\$30,000	
927			1760+65.31	E	residential	59	69	63	\$30,000	
928			1761+07.78	E	residential	59	64	63	\$5,000	
929			1760+25.76	E	residential	59	64	63	\$5,000	
930			1760+60.66	E	residential	59	69	63	\$30,000	
Plain										
843			1977+90.83	E	residential	55	62	61	\$5,000	
845			1975+95.18	E	residential	55	63	61	\$10,000	
850		1923+51.93	E	residential	55	62	61	\$5,000		
851		1919+83.93	E	residential	55	63	61	\$10,000		
853		1918+36.84	E	residential	55	63	61	\$10,000		
854		1917+61.13	W	residential	55	62	61	\$5,000		
Chipaway		FREEPORT								
545			2525+99.41	E	residential	60	65	63	\$10,000	
567			2503+80.40	W	residential	60	68	63	\$25,000	
575			2501+69.44	E	residential	60	66	63	\$15,000	
581			2500+57.59	E	residential	60	68	63	\$25,000	
591			2492+51.20	W	residential	60	67	63	\$20,000	
594			2491+54.26	W	residential	60	65	63	\$10,000	
Elm & Walnut										
717			2307+07.39	E	residential	55	65	61	\$20,000	
718			2305+43.07	E	residential	55	65	61	\$20,000	
723			2298+61.29	E	residential	55	65	61	\$20,000	
Forge										
738			2284+76.79	W	residential	55	63	61	\$10,000	
739			2283+05.58	W	residential	55	64	61	\$15,000	
742			2282+04.81	W	residential	55	65	61	\$20,000	
744			2280+43.12	W	residential	55	64	61	\$15,000	
763			2269+83.06	W	residential	55	63	61	\$10,000	
High										
681			2345+04.44	E	residential	55	63	61	\$10,000	
683			2341+86.85	E	residential	55	63	61	\$10,000	
686			2342+66.62	E	residential	55	64	61	\$15,000	
Richmond (Colonial to Forge)										
768			2259+67.89	E	residential	60	68	63	\$25,000	

						Noise Exposure (dBA)	FTA Criteria, L _{dn} (dBA)		
Residence ID	Street	Town	Station #	Side of Track	Land Use	Existing	Project plus existing	Severe Impact	Cost Justified
Richmond (Bryant to Beechwood)		F R E E T O W N	2210+19.22	E	residential	60	66	63	\$15,000
781	Simpson & Green								
699			2322+52.20	W	residential	44	60	59	\$5,000
700			2321+39.95	W	residential	44	66	59	\$30,000
702			2318+58.64	W	residential	44	64	59	\$25,000
703			2319+02.63	W	residential	44	62	59	\$15,000
707			2316+60.46	W	residential	44	69	59	\$30,000
709			2317+16.25	E	residential	44	63	59	\$20,000
674	Gunner's	L A K E V I L L E	2345+75.38	E	residential	44	59	58	\$5,000
	Howland								
728			2297+96.29	E	residential	55	62	61	\$5,000
733			2293+71.55	W	residential	55	63	61	\$10,000
735			2291+87.09	W	residential	55	65	61	\$20,000
741			2284+07.29	W	residential	55	63	61	\$10,000
745			2280+25.86	W	residential	55	65	61	\$20,000
746			2278+32.37	W	residential	55	63	61	\$10,000
793	Malbone		2162+70.78	E	residential	55	64	61	\$15,000
788	Adams	B E R K L E Y	2175+00.54	E	residential	45	66	59	\$30,000
	Cotley								
819			2036+55.39	E	residential	49	60	59	\$5,000
827			2025+97.32	E	residential	49	60	59	\$5,000
830			2024+24.47	E	residential	49	63	59	\$20,000
835			2020+57.21	E	residential	49	60	59	\$5,000
837			2020+59.89	E	residential	49	64	59	\$25,000
839			2018+05.65	E	residential	49	62	59	\$15,000
	Mill								
794			2153+13.68	E	residential	45	60	59	\$5,000
796			2151+23.66	E	residential	45	60	59	\$5,000
798			2149+63.63	E	residential	45	60	59	\$5,000
	Myricks								
797			2149+97.42	E	residential	60	67	63	\$20,000
799			2147+15.13	E	residential	60	67	63	\$20,000
800			2147+39.19	E	residential	60	66	63	\$15,000
	Padelford								
811		2105+67.47	E	residential	55	63	61	\$10,000	
812		2104+80.36	E	residential	55	65	61	\$20,000	
813		2102+81.12	E	residential	55	66	61	\$25,000	

Vibration Results and Mitigation Table



Milepost	Municipality	Street	Impacted Receptors	Length of Ballast Mat	Cost at \$180/ft.	Cost per Receptor	Cost Effective
Stoughton Station to Myricks Junction							
19.2	Stoughton	Brock Street	1	400 feet	\$72,000	\$24,000	Yes
	Stoughton	Washington Street	2				
19.5	Stoughton	Rogers Drive/	8	1200 feet	\$216,000	\$21,600	Yes
	Stoughton	Plain Street	2				
19.6	Stoughton	Columbus Avenue	2	600 feet	\$108,000	\$54,000	No
19.9	Stoughton	Smyth Street/	2	400 feet	\$72,000	\$24,000	Yes
20.2	Stoughton	Washington Street	1				
20.3	Stoughton	Morton Street/	1	800 feet	\$144,000	\$48,000	No
	Stoughton	Washington Street	2				
20.4	Stoughton	Washington Street	1	200 feet	\$36,000	\$36,000	No
22.2	Easton	Partridge Way	1	200 feet	\$36,000	\$36,000	No
22.4	Easton	Mullen Lane	1	200 feet	\$36,000	\$36,000	No
22.5	Easton	Linden Street/	1	700 feet	\$126,000	\$42,000	No
	Easton	Elm Street	2				
22.8	Easton	Main Street	1	200 feet	\$36,000	\$36,000	No
23.0	Easton	Center Street/	10	3000 feet	\$540,000	\$20,770	Yes
	Easton	Williams Street/	2				
	Easton	Avis Circle/	1				
23.3	Easton	Baldwin Street/	13				
23.5	Easton	off Center Street	1	200 feet	\$36,000	\$36,000	No
23.7	Easton	Tait Avenue	4	800 feet	\$144,000	\$36,000	No
24.1	Easton	Gary Lane	2	500 feet	\$90,000	\$45,000	No
24.2	Easton	Laurel Drive	3	400 feet	\$72,000	\$24,000	Yes
24.5	Easton	Short Street/	6	1300 feet	\$234,000	\$23,400	Yes
	Easton	Lantern Lane	4				
24.9	Easton	Depot Street	1	200 feet	\$36,000	\$36,000	No
25.1	Easton	Purchase Street/	4	1100 feet	\$198,000	\$33,000	No
	Easton	Granite Lane	2				
25.5	Easton	Kennedy Circle	11	1800 feet	\$324,000	\$29,455	Yes
25.8	Easton	Prospect Street	3	400 feet	\$72,000	\$24,000	Yes
26.0	Easton	Justin Drive	1	200 feet	\$36,000	\$36,000	No
26.7	Easton	Foundry Street	2	400 feet	\$72,000	\$36,000	No
30.0	Raynham	off Bridge Street	1	200 feet	\$36,000	\$36,000	No
30.2	Raynham	Bridge Street	3	400 feet	\$72,000	\$24,000	Yes
30.4	Raynham	Elm Street West	6	600 feet	\$108,000	\$18,000	Yes
30.8	Raynham	Carver Street	2	250 feet	\$45,000	\$22,500	Yes
31.5	Raynham	Britton Street	9	500 feet	\$90,000	\$10,000	Yes
31.9	Raynham	Wampanoag Road/	5	2100 feet	\$378,000	\$29,075	Yes
	Raynham	King Philips Street/	5				
32.2	Raynham	Chickering Road	3				
33.5	Taunton	Thrasher Street/	4	600 feet	\$108,000	\$15,430	Yes
	Taunton	Malcolm Circle	3				
33.8	Taunton	Longmeadow Road	1	200 feet	\$36,000	\$36,000	No
34.3	Taunton	Dean Street	1	200 feet	\$36,000	\$36,000	No
34.8	Taunton	Summer Street	5	500 feet	\$90,000	\$18,000	Yes
35.0	Taunton	High Street/	5*	1200 feet	\$216,000	\$27,000	Yes
	Taunton	Paul Bunker Drive	3*				
35.4	Taunton	Ingell Street	2	400 feet	\$72,000	\$36,000	No



36.0	Taunton	Hart Street/	6	900 feet	\$162,000	\$14,730	Yes
	Taunton	Alegi Avenue	5				
36.4	Taunton	Williams Avenue/	1	1150 feet	\$207,000	\$29,570	Yes
	Taunton	Plain Street	6				
37.5	Taunton	Debra Drive/	3	1200 feet	\$216,000	\$54,000	No
	Taunton	Plain Street West	1				
38.3	Berkley	Crabapple Drive/	2	550 feet	\$99,000	\$49,500	No
38.4	Berkley	Cotley Street	1	200 feet	\$36,000	\$36,000	No
39.8	Berkley	Padelford Street	3	500 feet	\$90,000	\$30,000	Yes
40.5	Berkley	Mill Village Road	1	200 feet	\$36,000	\$36,000	No
40.6	Berkley	Myricks Street/	2	1300 feet	\$234,000	\$46,800	No
	Berkley	Grove Street	3				

Myricks Junction to New Bedford

40.9	Lakeville	Malbone Street	1	200 feet	\$36,000	\$36,000	No
43.2	Lakeville	Howland Street	3	900 feet	\$162,000	\$54,000	No
43.5	Lakeville	Howland Street	3	900 feet	\$162,000	\$54,000	No
47.2	Freetown	Braley Road	5	700 feet	\$126,000	\$25,200	Yes
47.4	Freetown	Braley Road	3	600 feet	\$108,000	\$36,000	No
47.8	Freetown	Chipaway Drive	1	200 feet	\$36,000	\$36,000	No
51.5	New Bedford	Lynn Street	2	300 feet	\$54,000	\$27,000	Yes
53.5	New Bedford	Purchase Street	6	700 feet	\$126,000	\$21,000	Yes
53.8	New Bedford	Purchase Street	2	250 feet	\$45,000	\$22,500	Yes

Myricks Junction to Fall River

40.6	Berkley	Mill Street	6	900 feet	\$162,000	\$27,000	Yes
41.2	Berkley	Adams Lane	2	250 feet	\$45,000	\$22,500	Yes
41.8	Freetown	Richmond Road	3	500 feet	\$90,000	\$30,000	Yes
42.0	Freetown	Richmond Road	2	400 feet	\$72,000	\$36,000	No
42.3	Freetown	Colonial Drive	1	200 feet	\$36,000	\$36,000	No
42.6	Freetown	Richmond Road	1	200 feet	\$36,000	\$36,000	No
42.8	Freetown	Richmond Road	1	200 feet	\$36,000	\$36,000	No
43.0	Freetown	Richmond Road	1	200 feet	\$36,000	\$36,000	No
43.3	Freetown	Forge Road	4	600 feet	\$108,000	\$27,000	Yes
43.6	Freetown	Elm Street	1	200 feet	\$36,000	\$36,000	No
43.7	Freetown	Elm Street	2	450 feet	\$81,000	\$40,500	No
43.9	Freetown	Green Lane/	3	1000 feet	\$180,000	\$45,000	No
	Freetown	Sampson Lane	1				
44.4	Freetown	High Street/	1	300 feet	\$54,000	\$27,000	Yes
	Freetown	Alexander Drive	1				
47.2	Fall River	Leeward Road	9	1200 feet	\$216,000	\$24,000	Yes
47.7	Fall River	Rolling Green Drive	3*	1100 feet	\$198,000	<\$30,000	Yes
48.7	Fall River	North Main Street	19	2600 feet	\$468,000	\$24,630	Yes
49.3	Fall River	North Main Street	1	200 feet	\$36,000	\$36,000	No
49.7	Fall River	Wayland Street	2	250 feet	\$45,000	\$22,500	Yes
49.8	Fall River	Alton Street	1	200 feet	\$36,000	\$36,000	No
50.2	Fall River	North Main Street	13	1000 feet	\$180,000	\$13,850	Yes
50.5	Fall River	Pickering Street/	3*	1000 feet	\$180,000	\$25,715	Yes
	Fall River	Clinton Street/	2				
	Fall River	St. James Street	2				
50.8	Fall River	Murry Street/	17	2000 feet	\$360,000	\$7,350	Yes
	Fall River	Cory Street/	6				
	Fall River	Ballard Street/	3				



	Fall River	Almy Street/	9				
	Fall River	Railroad Avenue/	1				
	Fall River	North Court Street/	7				
	Fall River	Brownell Street/	4				
	Fall River	Thompson Street	2				
51.2	Fall River	Dyer Street	3	400 feet	\$72,000	\$24,000	Yes
51.6	Fall River	Durfee Street/	4	700 feet	\$126,000	\$18,000	Yes
	Fall River	Cedar Street	3				
51.7	Fall River	MapleStreet	2*	400 feet	\$72,000	\$18,000	Yes
51.9	Fall River	Meadow Street	7	600 feet	\$108,000	\$15,430	Yes

Totals			369				
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* Impacted receptors are multi-unit apartment buildings.

Appendix 4.8-A

Draft Programmatic Agreement

DRAFT V6
PROGRAMMATIC AGREEMENT
AMONG THE
UNITED STATES ARMY CORPS OF ENGINEERS,
THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER,
THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
FOR THE
SOUTH COAST RAIL PROJECT,
FALL RIVER/NEW BEDFORD TO BOSTON, MASSACHUSETTS

WHEREAS, the Massachusetts Department of Transportation (MassDOT) proposes to construct the South Coast Rail Project (Project) to establish electric passenger rail service between Fall River/New Bedford and Boston, extending the existing active Stoughton commuter rail line from its current terminus in Stoughton southward along a presently abandoned rail right-of-way through Easton and Raynham to Taunton, and from this point extending further south through upgrading of existing active freight rail tracks to accommodate passenger service via the Attleboro Secondary, which subsequently splits into the New Bedford Main Line to New Bedford and the Fall River Secondary to Fall River; the Project also includes new passenger rail stations, layover facilities and ancillary facilities, including power substations and catenary; and,

WHEREAS, the Project requires a Department of the Army (DA) Permit under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) for work in navigable waters of the United States, and Section 404 of the Clean Water Act (33 USC 1344) for the discharge of dredged or fill material into waters of the United States, including adjacent wetlands; and,

WHEREAS, MassDOT, in consultation with the United States Army Corps of Engineers (USACE) and the Massachusetts State Historic Preservation Officer (SHPO), conducted cultural resource studies for the Project in order to identify and evaluate historic properties located within the Area of Potential Effects (APE; defined in 36 CFR Part 800.16(d)), and listed or eligible for listing in the National Register of Historic Places (NRHP); and,

WHEREAS, the USACE has determined the Project will have effects to historic properties and that said effects are not yet fully determined since the specifics of the final design are not yet known, and has consulted with the SHPO and the Advisory Council on Historic Preservation (ACHP) pursuant to 36 CFR Part 800.6 and 800.14, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470f); and,

WHEREAS the USACE has determined the Project will have an adverse effect on the H.H Richardson Historic District of North Easton National Historic Landmark and has consulted with the SHPO, ACHP and the National Park Service (NPS) pursuant to 36 CFR Part 800.6, 800.10(c) and 800.14, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470f); and,

WHEREAS, the USACE has determined, in consultation with the SHPO, that the APE is defined by work types, operations and resource class as follows: (1) for below-ground resources: the rail corridors, stations (including boarding platforms, parking lots, access roads, and associated features), layover and maintenance facilities, electric substations, construction and staging areas, permanent access/maintenance road (new lane within existing right-of-way), and roads (new lane outside existing right-of-way, temporary and permanent access to proposed facilities, and intersections) within the area of direct impact resulting from proposed construction activities (the Permit Area, defined in 33 CFR Part 325, Appendix

C, Section 1(g); (2) for above-ground resources the rail corridor within 800 feet (400 feet to either side of centerline), the stations within 250 feet from perimeter of proposed facility boundary, those locations associated with layover and maintenance facilities within 250 feet from perimeter of proposed facility boundary, those locations associated with construction laydown and staging areas within 250 feet from perimeter of proposed facility boundary, those locations associated with roads outside existing right-of-way as well as temporary and permanent access roads and intersections within 400 feet from proposed centerline; and, (3) Historic Properties of Religious and Cultural Significance to Indian Tribes to be determined in consultation with federally-recognized Indian Tribes known by the USACE to have an interest in the geographic region that includes the APE; and,

WHEREAS, the Tribal Historic Preservation Officers (THPOs) of the Wampanoag Tribe of Gay Head (Aquinnah), the Mashpee Wampanoag Tribe, and the Narragansett Indian Tribe, have been consulted and invited to sign the PA as concurring parties; and,

WHEREAS, the Berkley Historical Commission, Canton Historical Commission, City of New Bedford, Easton Historical Commission Fall River Historical Commission, Freetown Historical Commission, Lakeville Historical Commission, New Bedford Historical Commission, Stoughton Historical Commission, and the Taunton Historic District Commission were invited to participate in the consultation process but did not choose to do so and have therefore not been invited to concur in the PA; and,

WHEREAS, the USACE has issued a Final Environmental Impact Statement (FEIS) dated [month, day, year] to document efforts to identify and then avoid, minimize and mitigate adverse impacts to resources including historic properties; and,

WHEREAS, the USACE, in accordance with Section 800.2(d)(3), used the agency's procedures for public involvement under the National Environmental Policy Act (NEPA) to inform the public of the undertaking and solicit their views on the Project, and has distributed the FEIS to appropriate federal agencies, federally recognized Indian Tribes, state agencies and the public; and,

WHEREAS, pursuant to 36 CFR Section 800.13, the USACE and MassDOT, with concurrence from the SHPO and the ACHP have developed procedures in this PA to ensure that the identification and evaluation of historic properties, assessment of effects, consideration of avoidance alternatives, and development of treatment and mitigation plans for unforeseen effects to previously identified historic properties and/or historic properties discovered during implementation of the undertaking are properly coordinated with all phases of the design and construction of the undertaking; and,

NOW, THEREFORE, the USACE, the SHPO, MassDOT, NPS, and the ACHP agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account foreseen and unforeseen future effects to historic properties.

STIPULATIONS

USACE, in coordination with MassDOT, will ensure that the following measures are carried out.

I. PROJECT MONITORING

A. USACE affirms, and MassDOT concurs, that avoidance of adverse effects to historic properties remains the preferred course of action and that design activities may include the shifting of the project

limits if necessary to avoid, minimize or mitigate adverse effects to historic properties, so long as same remains in compliance with the DA permit conditions or USACE-authorized modification thereto.

B. USACE and MassDOT will ensure that contractors involved in the implementation of all phases of the undertaking are aware of and comply with the requirements of the PA. Compliance with this the PA is required as a condition of the DA permit and a part of the project contract, and will be written into the project contract.

C. To ensure that avoidance or minimization of adverse effects to historic properties is the preferred option during design and construction, MassDOT will develop a Cultural Resource Monitoring Program specific to this project that will require a Cultural Resource Monitor (CRM) with specific responsibilities to coordinate the requirements of this agreement for the Project as the liaison for MassDOT and the USACE.

1. The CRM will meet the professional qualifications outlined in Stipulation XI.
2. Oversight for the Cultural Resource Monitoring Program will be provided by USACE and MassDOT to whom the CRM reports.
3. The CRM will act as the liaison and work cooperatively with USACE and MassDOT and its contractors throughout the design/bid/build program.
 - a. The design/bid/build program will require the contractor(s) to design individual sections of the Project, which have not yet been defined.
 - b. The CRM will provide the design and construction contractors with the list and locations of the above-ground and below-ground historic properties presented in Appendices A and B and undetermined historic properties listed in Appendix C. USACE and MassDOT will ensure that avoidance of adverse effects to historic properties is the preferred treatment during the design phase and will utilize all measures to avoid adverse effects. The design/bid/build program will take into account measures presented in Stipulation III.
 - c. During the design phase, the CRM will be available to assist the contractor regarding the status of the design as it relates to those historic properties identified in Appendices A and B. In addition, the availability of geotechnical data and access to previously inaccessible areas may result in information associated with undetermined historic properties listed in Appendix C. If known or undetermined historic properties may be affected, the CRM will notify USACE and MassDOT of the situation through submission of a report via electronic mail describing how the proposed design affects the known or undetermined historic property. USACE and MassDOT will review the report, consult with the SHPO, and take into account measures presented in Stipulation III.
 - d. When the design reaches 30 percent for a given section, the CRM will review all available plans and specifications and determine if the design might affect historic properties listed in Appendices A, B and C. If historic properties may be affected, the CRM will notify USACE and MassDOT of the situation through submission of a report via electronic mail describing the historic property, the location of the property and how the proposed design affects the property. USACE and MassDOT will review the report, consult with the SHPO, and take into account measures presented in Stipulation III.

e. When the design reaches 60 percent for a given section, the CRM will review all available plans and specifications and determine whether the design might affect historic properties. If historic properties may be affected, the CRM will notify USACE and MassDOT of the situation through submission of a report via electronic mail describing the historic property, the location of the property and how the proposed design affects the property. USACE and MassDOT will review the report, consult with the SHPO, and take into account measures presented in Stipulation III.

f. When the design reaches 90 percent for a given section, the CRM will complete a review of all available plans and specifications. If historic properties may be affected, the CRM will notify USACE and MassDOT of the situation through submission of a report via electronic mail describing the historic property, the location of the property and how the proposed design affects the property. USACE and MassDOT will review the report, consult with the SHPO, and take into account measures presented in Stipulation III.

g. Prior to construction, the contractor will hold a field review meeting once the access, staging and temporary construction zones that may be required have been determined and detailed on construction plans. The design plans will be provided to the CRM, USACE, MassDOT and SHPO a minimum of 21 days before the field review meeting. It is expected that by the field review meeting the construction limits will be flagged and will define the maximum extent of ground disturbance. Comments of the field review meeting attendees will be addressed and take into account measures presented in Stipulation III before proceeding with initial ground disturbance.

d. The MassDOT and/or their contractor will also hold preconstruction field review meetings to review specific information related to individual property owners of historic properties and their concerns, including visual impacts, construction-related activities and scheduling. These meetings will be in the same format as the field review meetings, and will allow the CRM, USACE, and MassDOT and any other attendees to comment. USACE and MassDOT will review and consult with the SHPO before allowing construction to proceed if any new issues arise.

e. The preconstruction field meetings will provide an opportunity for the CRM, USACE, MassDOT, SHPO, other members of the public and the project team to comment on the plans prior to the initiation of ground-disturbing activities. Any unforeseen effects to historic properties listed in Appendices A and B will be resolved in accordance with Stipulation V below.

f. All design enhancements and/or aesthetic treatments that may affect historic properties will be subject to review and concurrence by the SHPO.

g. The contractor will hold weekly and as-needed construction field review meetings with the CRM to review ongoing construction. If theretofore unknown effects to historic properties may occur, or if there is an alteration to the construction plan, the CRM will notify USACE and MassDOT of the situation and provide them with a report via electronic mail describing the situation, the historic property, the location of the property and how the proposed design affects the property. USACE and MassDOT will review the report and consult with the SHPO before authorizing any work in that location.

h. The CRM shall provide the consulting parties with a schedule for the undertaking that includes opportunities for on-site reviews by the consulting parties. Should MassDOT modify the schedule, the consulting parties will typically be given 20 working days' notice.

II. PUBLIC PARTICIPATION

A. USACE will utilize MassDOT to ensure that an active public participation program regarding effects on historic properties is carried out. MassDOT will develop and maintain a proactive communication program that will be led by MassDOT's Community Relations Liaison (CRL) for the Project. During final design, MassDOT will conduct periodic public briefing sessions, continue to maintain the project website, and provide information on potential construction impacts and mitigation plans to impacted communities and/or abutters. MassDOT and/or its Contractors will maintain a log of community concerns and responses, with action items and resolutions. During construction, MassDOT and its Contractors will maintain a database for communication with abutters, elected officials and interested members of the public. This database will be used to communicate construction plans, schedule information and updates. MassDOT will provide regular updates on construction progress via the website, media notices and social media, maintain a construction field office (or offices), and will provide a telephone hotline for resolving urgent issues or questions.

B. Should any member of the public raise an objection pertaining to the manner in which the terms of this Agreement are carried out, at any time during its implementation, the USACE shall take the objection into account by consulting with the objector to resolve the objection. When USACE responds to an objection, it shall notify MassDOT and the CRM of the objection and the manner in which it was resolved. USACE may request assistance of MassDOT and the CRM to resolve objections.

C. Consistent with Section 304 of the National Historic Preservation Act of 1966, as amended, the signatories and participating concurring parties to this Agreement will withhold from disclosure to the public, information about the location, character, or ownership of a historic property if it is determined that disclosure may (1) cause a significant invasion of privacy, or (2) risk harm to a historic property.

III. TREATMENT OF HISTORIC PROPERTIES

A. USACE will ensure that avoidance of adverse effects to any previously identified historic properties is the preferred alternative and will utilize all practicable measures to avoid adverse effects. If avoidance is not possible and an adverse effect will result, MassDOT will develop a Mitigation Plan, in consultation with USACE, the CRM and any other consulting parties, and submit the mitigation plan to the SHPO for review and concurrence. USACE shall direct MassDOT to implement the mitigation plan once it is approved by the SHPO. If, after consultation, USACE and the SHPO cannot agree on appropriate terms for the mitigation plan, USACE will refer the matter to the ACHP pursuant to Stipulation IX. The USACE and MassDOT will ensure that the following measures will be carried out and considered in the design and construction process.

B. Historic Buildings, Districts, National Historic Landmarks, Cemeteries

1. USACE and MassDOT shall avoid adverse effects to the above-ground historic properties listed in Appendix A. Known or expected impacts are provided in Appendix D.

2. As presently conceived (i.e., on the effective date of this Agreement), the Project has the potential to directly impact the Canton Junction Railroad Station, Meade Rubber Company, the Dighton and Somerset Line, and the North Main Street Area of Fall River Historic District.

3. The Project may require reconstruction or widening of the Forge Pond Bridge, Weaver Street Railroad Bridge, and Central Street Road Bridge.
4. The Project may cause indirect effects associated with an alteration in setting, increased noise or vibration resulting from construction or operation to the remaining historic properties listed in Appendix D.
5. If avoidance is not possible through design change, minimization of any indirect effects should be designed to reduce ground disturbance, visual, noise and vibration levels as may be appropriate to the historic property.
6. If mitigation is required, the focus should be on maintaining the historic character, integrity and setting of the historic property through the use of vibration reduction techniques, noise barriers, and screening.
7. To the extent practicable, MassDOT will use compatible materials to minimize adverse visual impacts to historic structures and districts. All repair, rehabilitation, or modification of historic properties will be performed in accordance with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties to the maximum extent practicable.
8. Construction staging and storage areas shall be located in protected areas outside historic districts and properties wherever possible, and in unobtrusive locations within historic districts or properties if alternative locations are not possible.
9. Clear-cutting of trees and vegetation along the railroad ROW that would result in an adverse visual impact on historic properties will be avoided to the maximum extent practicable. As documented in existing conditions pre-construction vegetation documentation, existing trees and vegetative screening will be retained to buffer historic properties from the rail line to the maximum extent practicable and with consideration for public safety, operational requirements, cost, and maintenance considerations.
10. USACE and MassDOT, in consultation with the SHPO, will develop a construction avoidance and protection plan for potential impacts to the historic Braley Cemetery in Freetown.
11. USACE and MassDOT, in consultation with the SHPO will conduct additional documentary research and field surveys, as necessary, to create historic property boundaries and conduct additional survey, if needed, for the Elisha Harvey Gravesite in relation to the Project, to complete the effects analysis, and develop a written avoidance and protection plan for the property prior to project construction activities.

C. Archaeological Resources

1. Where possible, USACE and MassDOT shall avoid affecting the NRHP-eligible archaeological sites listed in Appendix B.
2. USACE and MassDOT will complete any required subsurface survey (intensive [locational] and site examination) to make NRHP eligibility determinations and assess effects for those locations identified as archaeologically sensitive (Appendix C). If no archaeological sites are identified or sites are identified in disturbed stratigraphic contexts, then no further work will be required. If the survey and site examination identify NRHP-eligible site(s), then avoidance will be the preferred option. If avoidance is not possible and an adverse effect will result, MassDOT will develop a mitigation plan and once it is acceptable to the

CRM provide it to USACE for review and consultation with other consulting parties who will have 20 working days for review and comment or concurrence. This mitigation plan will include a section evaluating design modifications for minimizing effects to historic properties. USACE shall direct MassDOT to implement the mitigation plan once the SHPO concurs with the plan. If, after consultation, USACE and the SHPO cannot agree on appropriate terms for the mitigation plan, USACE will refer the matter to the ACHP pursuant to Stipulation IX.

3. USACE and MassDOT will complete any required subsurface survey (intense [locational] and site examination) to make NRHP eligibility determinations and assess effects for those Project locations not currently identified or for which geotechnical information was not previously available, including catenary structures and work or construction equipment storage or staging areas. If no archaeological sites are identified or sites are identified in disturbed stratigraphic contexts, then no further work will be required. If the survey and site examination identify NRHP eligible site(s), then avoidance will be the preferred option. If avoidance is not possible and an adverse effect will result, MassDOT will develop a mitigation plan and once it is acceptable to the CRM provide it to USACE for review and consultation with other consulting parties who will have 20 working days for review and comment or concurrence. This mitigation plan will include a section evaluating design modifications for minimizing effects to historic properties. USACE shall approve and direct MassDOT to implement the mitigation plan once the SHPO concurs with the plan. If, after consultation, USACE and the SHPO cannot agree on appropriate terms for the mitigation plan, USACE will refer the matter to the ACHP pursuant to Stipulation IX.

D. Historic Properties of Religious and Cultural Significance to Indian Tribes

1. The USACE will continue consultation with federally-recognized Indian Tribes regarding historic properties of religious and cultural significance within the Project APE.

IV. UNANTICIPATED DISCOVERIES

A. If previously unidentified historic properties are identified during construction, then construction will cease in tan area sufficient to ensure there will be no inadvertent impacts, and the CRM will notify the USACE and MassDOT with information about the historic properties. USACE, in consultation with the CRM and other consulting parties, shall evaluate the historic properties to determine if they meet the NRHP criteria and request SHPO concurrence.

1. If the USACE and the SHPO agree that a property is eligible for listing on the NRHP, USACE, in cooperation with the CRM and any other consulting parties, will evaluate the potential effects to that historic property according to Stipulation III above.

2. If the USACE and the SHPO disagree regarding the NRHP eligibility of a property, or should the ACHP so request, the USACE will request a formal determination of eligibility from the Keeper of the NRHP. The historic property will be treated as eligible until the Keeper's decision is rendered, and potential effects to the property will be evaluated according to Stipulation III above.

B. USACE will ensure that avoidance of adverse effects to any newly discovered eligible historic properties is the preferred alternative and will utilize all practicable measures to avoid adverse effects. If avoidance is not practicable and an adverse effect will result, MassDOT will develop a mitigation plan, and once it is acceptable to the CRM provide it to USACE for review and consultation with other consulting parties who will have 20 working days for review and comment or concurrence. This

mitigation plan will include a section evaluating design modifications for minimizing effects to historic properties and take into account feasibility of engineering, cost, time and other appropriate factors. USACE shall approve and direct MassDOT to implement the mitigation plan once the SHPO concurs with the plan. If, after consultation, USACE and the SHPO cannot agree on appropriate terms for the mitigation plan, USACE will refer the matter to the ACHP pursuant to Stipulation IX.

V. UNFORESEEN EFFECTS

A. Based on Stipulation IV above, the USACE may identify unforeseen effects to historic properties. USACE, in consultation with the SHPO and MassDOT, along with input from the CRM and other consulting parties, shall evaluate the effects to the property according to 36 CFR Section 800.5.

1. If the USACE and the SHPO agree that a historic property will be adversely affected, then USACE will develop a suitable mitigation plan in consultation with the CRM and any other consulting parties and submit the mitigation plan to the SHPO for review and concurrence. USACE shall direct MassDOT to implement the mitigation plan once the Massachusetts SHPO concurs with the plan. If, after consultation, USACE and the Massachusetts SHPO cannot agree on appropriate terms for the mitigation plan, USACE will refer the matter to the ACHP pursuant to Stipulation IX of this PA.

2. If the USACE and the SHPO disagree regarding the effects to the property, the USACE will request the ACHP's opinion. The ACHP will advise the USACE of its opinion regarding the effects to the property. USACE will take into account the ACHP's opinion before making a final determination. If an adverse effect is found by USACE, MassDOT will develop a mitigation plan, which will be reviewed by the CRM before submittal to the USACE for approval and implementation by MassDOT in accordance with Stipulation III.

VI. CHANGE IN ELIGIBILITY OF HISTORIC PROPERTIES

A. Future refinements to the project design may result in the need for evaluation of NRHP eligibility for previously undetermined historic properties (which may include, but are not limited to, those properties listed in Appendices A and B). USACE, in consultation with MassDOT, the CRM and other consulting parties, shall evaluate the historic properties to determine if they meet the NRHP criteria and shall request SHPO concurrence according to Stipulation III above.

B. If any properties previously considered not eligible are determined eligible as a result of the provisions in this stipulation, then effects to those properties will be considered according to Stipulation III above.

1. If substantive new information is provided in writing to the USACE about a particular property that was previously determined not eligible, USACE will consider the information, apply NRHP criteria, and forward its determination of eligibility to the SHPO with a request for review and concurrence. The SHPO will inform the USACE within 20 working days whether or not it concurs with USACE's determination of eligibility for the property in question. If the USACE and the SHPO agree the criteria are met, the property shall be considered eligible. If the USACE and the SHPO agree the criteria are not met, the property will be considered not eligible. If the USACE and the SHPO do not agree on whether the criteria are met, the eligibility of the property will be resolved in accordance with Stipulation IX, below. Any such property will be treated as eligible while it is under review by USACE and the SHPO, and potential effects to the property will be evaluated according to Stipulation III above.

2. Consistent with 36 CFR Part 800.4(c)(2), if the SHPO and the USACE disagree on NRHP eligibility for a particular property, or if the ACHP or the Secretary of Interior so requests, the USACE shall write to the Keeper of the NRHP and request a determination of eligibility in accordance with 36 CFR Part 63. Such properties will be treated as an eligible property while under review by the Keeper, and potential effects to the property will be evaluated according to Stipulation III above. The Keeper's determination of eligibility is binding.

VII. COORDINATION OF REVIEWS

A. The SHPO, ACHP, and the concurring parties will have a review period of 20 working days to comment on all documents, plans and specifications provided by the USACE under the terms of this PA. Alteration of the review time frame will require unanimous agreement among the USACE, MassDOT, SHPO and ACHP. If multiple historic properties are involved, the review time may be extended, as appropriate and based on unanimous agreement among the signatories.

B. The ACHP, at its discretion, may delegate its review of documents, plans and specifications required under the terms of this PA to the SHPO.

C. The CRM will provide any comments and recommendations directly to the USACE. If the SHPO, ACHP, and the concurring parties fail to provide comments within the designated review period, the USACE will assume their concurrence and proceed with the proposed action or activity.

VIII. PUBLIC OUTREACH AND EDUCATION

A. MassDOT will organize several opportunities for the public to learn about the results of the archaeological investigations and historical studies conducted for the Project. These opportunities may include: (1) public open houses; (2) a website that features information about the ongoing investigations; (3) public presentations for local communities, and avocational and professional audiences; (4) historic interpretive signs; at stations.; and (5) preparation of a public brochure/popular report and professional articles describing the investigations.

IX. DISPUTE RESOLUTION

A. Should any signatory object in writing within 10 working days to documents submitted for review pursuant to the terms of the PA, the USACE shall work with the disputing party to resolve the dispute. If USACE is unable to resolve the dispute, they will consult with the SHPO and ACHP to resolve the objection. If the USACE determines that the objection cannot be resolved, the USACE shall forward all documentation relevant to the dispute to the ACHP and request that the ACHP comment.

B. Within 10 working days after receipt of the pertinent documentation, the ACHP shall either:

1. Provide the USACE with recommendations to take into account in reaching a final decision regarding the dispute; or

2. Notify the USACE that the ACHP will comment in accordance with 36 CFR Section 800.7(c) and proceed to comment.

C. Any ACHP comment provided in response to such request shall be taken into account by the USACE in accordance with 36 CFR Section 800.6(c)(4) with reference only to the subject of the dispute. The USACE responsibility to carry out all other actions and activities under this PA that are not the subject of the dispute remain unchanged.

X. EMERGENCY SITUATIONS

Should an emergency situation occur, which represents an imminent threat to public health or safety, or creates a hazardous condition, MassDOT shall immediately notify the USACE and SHPO of the condition that has initiated the situation and the measures taken to respond to the emergency or hazardous condition. Should the USACE or SHPO not concur, they will notify MassDOT within three (3) business days if the nature of the emergency or hazardous condition allows for such coordination.

XI. PROFESSIONAL QUALIFICATIONS

All cultural resource work carried out pursuant to this PA shall be performed by or under the direct supervision of qualified individuals in the appropriate historic preservation discipline meeting, at a minimum, the appropriate Federal qualifications set forth in 62 FR 3333707 (June 20, 1997). The professional disciplines include: Archaeology, History and Architectural History, and/or Architecture.

XII. AMENDMENTS

If USACE, ACHP, MassDOT, or the SHPO determines that the terms of this PA will not or cannot be carried out or that an amendment to its terms must be made, that party shall provide a written explanation for such a determination to all signatories and immediately consult with the other signatories to develop an amendment to this PA. The amendment will be effective on the date a copy is signed by USACE, ACHP, the SHPO, and MassDOT. If USACE, ACHP, and the SHPO cannot agree to appropriate terms to amend the PA, any one of these parties unilaterally may terminate the agreement in accordance with Stipulation XIII below.

XIII. TERMINATION

A. If the USACE determines that it cannot implement the terms of this PA, or if the SHPO or ACHP determine that the PA is not being properly implemented the USACE, SHPO or ACHP may propose to the other parties that the PA be terminated.

B. The party proposing to terminate this PA shall notify all parties to this PA accordingly in writing, explaining the reasons for termination and affording them at least 30 days to consult and seek alternatives to termination.

C. Should such consultation fail and the PA is terminated, the USACE shall either:

1. Consult in accordance with 36 CFR Section 800.6 to develop a new PA; or
2. Request the comments of the ACHP pursuant to 36 CFR Section 800.7 and take into account such comments in accordance with such section prior to continuing the undertaking.

XIV. SUNSET CLAUSE

The terms of this PA are valid through completion of all phases of compensatory wetland mitigation, unless otherwise agreed to by the signatories to the PA.

Revised Draft

PROGRAMMATIC AGREEMENT IMPROVEMENTS TO SOUTH COAST RAIL PROJECT, FALL RIVER/NEW BEDFORD TO BOSTON, MASSACHUSETTS

Execution of this PA by USACE, and implementation of its terms evidence that USACE has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: _____ Date: _____
Chairman

U.S.ARMY CORPS OF ENGINEERS

By: _____ Date: _____
District Engineer, New England District, U.S. Army Corps of Engineers

MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER

By: _____ Date: _____
State Historic Preservation Officer

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

By: _____ Date: _____
Secretary of Transportation

PROGRAMMATIC AGREEMENT IMPROVEMENTS TO SOUTH COAST RAIL PROJECT, FALL
RIVER/NEW BEDFORD TO BOSTON, MASSACHUSETTS

CONCUR:

MASHPEE WAMPANOAG TRIBE

By: _____ Date: _____

NARRAGANSETT INDIAN TRIBE

By: _____ Date: _____

WAMPANOAG TRIBE OF GAY HEAD (AQUINNAH)

By: _____ Date: _____

APPENDIX A

NATIONAL REGISTER-ELIGIBLE ABOVE-GROUND HISTORIC PROPERTIES, STOUGHTON ALTERNATIVES

PROPERTY ID	TOWN	PROPERTY NAME/ LOCATION	ADDRESS	NRHP STATUS*; CRITERIA
Ca.C	Canton	Washington Street	Washington St	NRE;A, C
Ca.H	Canton	Washington Street/Canton Center	Washington Street/Canton Center	MHC-DOE
Ca.001	Canton	Canton Junction Railroad Station	666 Sherman St	NRE;A, B, C
Ca.002	Canton	Revere Copper Company Railroad Embankment	Revere St	NRE;C
Ca.006	Canton	Canton Public Library	786 Washington St	MHC-DOE;A, C
Ca.007	Canton	Forge Pond Railroad Bridge	Between Washington and Bolivar Sts	MHC-DOE;C
Ca.024	Canton	Canton Water Works	44 Pine St	NRE;A, C
St.B	Stoughton	Downtown Stoughton Area	Pearl, Perry, School, Washington, Pleasant, and Wyman Sts	NRE;A, C
St.022	Stoughton	Pearl Street Cemetery	Pearl St	NRE; A, C
St.023, St.B	Stoughton	Stoughton Town Hall	10 Pearl St	NRIND
St.024	Stoughton	Mystic Rubber Company	2 Canton St	NRE;A, C
St.025	Stoughton	Stoughton Old Colony Railroad Station	45-47 Wyman St	NRIND;A, C
St.026	Stoughton	Lucius Clapp Memorial Library	6 Park St	NRIND
St.046	Stoughton	Meade Rubber Company	25 Brock St	NRE;A, C
Ea.008, Ea.A, Ea.B (contributing)	Easton	Dighton & Somerset Line	Parallel to Mechanic Street from Elm Street to Main Street	Contributing in NRDIS, North Easton Historic District
Ea.B	Easton	North Easton Historic District	Elm, Lincoln, and Main Sts	NRDIS;A, C
Ea.C	Easton	Holmes-Linden Street Area	Holmes and Linden Sts	NRE;A, C
Ea.D	Easton	H.H. Richardson Historic District	Elm and Main Sts	NHL, NRDIS;A, C
Ea.E	Easton	Center Street Area	Center St	NRE;A, C
Ea.F	Easton	Easton Center Area	Center, Depot, and Short Sts	NRE;A, C
Ea.G	Easton	Hayward - Pool Area	Foundry St	NRE;A, C

PROPERTY ID	TOWN	PROPERTY NAME/ LOCATION	ADDRESS	NRHP STATUS*; CRITERIA
Ea.003	Easton	Old Colony Railroad Station	Off Oliver St on Railroad Right of Way	NRIND, in NHL District; A, C
Ra.001	Raynham	Residence and Barn	521 Prospect Hill	NRE
Ra.B	Raynham	Carver Street Area	Carver St, Broadway (Route 138)	NRE;A, C
Ra.011	Raynham	Dog Kennel and Track Property	385 Thrasher St	NRE;A
Ta.B	Taunton	Taunton Center Area	Dean, Park, and Summer Sts	NRE;A, C
Ta.C	Taunton	Taunton Multiple Resource Area	Multiple Throughout city of Taunton	NRMPs; A, B, C, D
Ta.D	Taunton	High Street Area	High, Weir, and Somerset Sts	NRE; A, C
Ta.18, Ta.C	Taunton	Dean-Hartshorn House	68 Dean St	NRIND, NRMPs, LHD
Ta.019, Ta.B, Ta.C	Taunton	Old Colony Railroad Station	40 Dean St	NRIND, NRMPs, LHD;A, C
Ta.020, Ta.B, Ta.C	Taunton	William Woodward House	117 Arlington St	NRIND, NRMPs, LHD; A, C
Ta.021, Ta.B, Ta.C	Taunton	Charles r. Atwood House	30 Dean St	NRIND, NRMPs, LHD; A, C
Ta.022, Ta.B, Ta.C	Taunton	Theodore Dean House	26 Dean St	NRIND, NRMPs, LHD;A, C
Ta.23, Ta.B, Ta.C	Taunton	C.J.H. Bassett House	20 Chestnut St	NRIND, NRMPs, LHD
Ta.28, Ta.B, Ta.C	Taunton	Abiezar Dean House	57 Summer St	NRIND, NRMPs, LHD
Ta.029, Ta.B, Ta.C	Taunton	Neck of Land Cemetery	Summer St	NRIND, NRMPs, LHD;A, C
Ta.89	Taunton	Cohannet Mills #3	120 Ingell St	NRIND
Be.C	Berkley	Myricks Street Area	Myricks, Grove, and Mill Sts	NRE;A, C
Be.006	Berkley	Residence	1 Macomber St	NRE;A, C
La.C	Lakeville	Assonet Cedar Swamp Area	Pierce Ave; County and Howland Rds; Freetown, Mill, and Malbone Sts	NRE;A, C, D
La.024	Lakeville	Peirce and Haskins Cemetery	Off Adams Lane	NRE; A, C
Ft.C	Freetown	Slab Bridge road area	Slab Bridge, Forge, Richmond, and Howland Rds	NRE; A, C
Ft.D	Freetown	Assonet Historic District	Mill, Water, Main, Pleasant, Elm, Forge Sts	NRDIS;A, C

PROPERTY ID	TOWN	PROPERTY NAME/ LOCATION	ADDRESS	NRHP STATUS*; CRITERIA
Ft.009	Freetown	Richmond Road / Maple Tree Crossing Bridge	Richmond Rd	MHC-DOE;C
NB.C	New Bedford	Acushnet Heights Historic District	State, Pleasant, Linden, Austin, Hazard, and Country Sts	NRDIS;A, C
NB.D	New Bedford	Wamsutta Mills Historic District	Acushnet Ave; Logan, North Point, and Wamsutta Sts	NRDIS;A, C
FR.N, FR.C	Fall River	American Printing Company-Metacomet Mill	Anawan St	NRMPS, NRDIS; A, C
FR.005, FR.C	Fall River	William Collins House	3775 North Main St	NRMPS, NRIND; A, C
FR.006, FR.C	Fall River	North Christian Congregational Church	3538 North Main St	NRMPS, NRIND; A, C
FR.010, FR.C	Fall River	Borden-Winslow House	3063 North Main St	NRMPS, NRIND; A, C
FR.012, FR.C	Fall River	Canedy, Squire William B. House	2634 North Main St	NRMPS, NRIND; A, C
FR.013	Fall River	William H. Wiley Middle School	2585 North Main St	NRE
FR.015.FR.C	Fall River	Border City Mills-Mill #2	1 Weaver St	NRMPS, NRIND; A, C
FR.016	Fall River	Weaver Street Railroad Bridge	Weaver St	MHC-DOE; A, C
FR.017	Fall River	Residence	311 Crescent St	NRE;A, C
FR.026, FR.C	Fall River	Brightman, Hathaway House	205 Crescent St	NRIND;A, C
FR.050	Fall River	St. Michael's Roman Catholic Church	207 Essex St	NRE; A, C
FR.066, FR.C	Fall River	St. Joseph's Roman Catholic Church	1355 North Main St	NRIND, NRMPS A, C
FR.067	Fall River	Cotton Warehouse	7 Oregon St	NRE;A, C
FR.070, FR.M	Fall River	Al Mac's Diner	135 President Ave	NRMPS, NRIND;A, C
FR.081	Fall River	Residence	524 Durfee St	NRE; A C
FR.082	Fall River	Lafayette-Durfee House	94 Cherry St	NRIND;A, C
FR.084	Fall River	Central Street Bridge over Quequechan River	Central St	MHC-DOE;C
FR.089	Fall River	Borden and Remington Company	85-115 Anawan St	NRE;A, C

PROPERTY ID	TOWN	PROPERTY NAME/ LOCATION	ADDRESS	NRHP STATUS*; CRITERIA
FR.003	Fall River	Jael Hathaway House	4042 North Main St	NRE;A, C
FR.052	Fall River	St Matthew's Convent	189 Wellington Street	NRE;A, C
FR.053	Fall River	St Matthew's School	231 Wellington Street	NRE;A, C
FR.110	Fall River	St. John's Cemetery	Brightman and St. Mary Streets	NRE;A, C
NB.G	New Bedford	National Spun Silk Co. – Oneko Mills	Brook St	NRE; A, C
NB.011	New Bedford	Manomet Mill #4 - Manomet Tire Cord Fabric Mill	117 King St	NRE;A, C
NB.012	New Bedford	Belleville Warehouse Company Cotton Storage Building	51 King St	NRDOE;A, C
NB.026	New Bedford	Pierce Brothers Textile Mill Complex	1125-1129 County St	NRE;A, C
NB.029	New Bedford	Christ Presbyterian Church	1097 County St	NRE;C
NB.053	New Bedford	Purchase Street Fire Station	2071 Purchase St	NRE;A, C
NB.063	New Bedford	Union Street Railway Carbarn	1959 Purchase St	NRIND, NRDIS- C;A
NB.065	New Bedford	Dawson Building	1843-1855 Purchase St	NRIND, NRDIS- C;A, C
NB.081	New Bedford	New Bedford Cotton Storage Warehouse Co., North Stores	19 Jean St	NRE;A, C
FR.C	Fall River	Fall River Multiple Resource Area	Multiple	NRMPS;A, B, C
FR.D	Fall River	North Main Street Area	North Main St	NRE;A, C
FR.E, FR.C	Fall River	Border City Mills	Weaver and West Sts	NRDOE, NRMPS;A, C
FR.F, FR.C	Fall River	Sagamore Mill Nos. 1 and 3	Ace St	NRMPS, NRDIS;A, C
FR.G, FR.C	Fall River	Sagamore Mill No. 2	North Main St	NRMPS, NRDIS;A, C
FR.H, FR.C	Fall River	Foster Spinning Company	Cove St	NRMPS, NRDIS;A, C
FR.J, FR.C	Fall River	Narragansett Mills	North Main St	NRMPS, NRDIS; A, C
FR.K. FR.C	Fall River	North Burial Ground	North Main St	NRMPS, NRDIS; A, B, C
FR.L	Fall River	Durfee Street Area	North Main and Durfee Sts	NRE; A, C

PROPERTY ID	TOWN	PROPERTY NAME/ LOCATION	ADDRESS	NRHP STATUS*; CRITERIA
FR.M	Fall River	Diners of Massachusetts	multiple	NRMPS; A, C

*NRHP Status

NHL	National Historic Landmark
NRDIS	National Register Historic District
NRIND	Property individually listed in the National Register
NRMPS	District or Property individually listed in the National Register as part of a NRMPS
NRDOE	Property formally determined eligible by Keeper of the National Register
MHC-DOE	Property evaluated as eligible by MHC
NRE	Property National Register eligible, MHC Concurrence on 2/21/2013, 4/3/2013
NRDIS-C	Property contributing to an NRHP-listed district
LL	Property individually listed in the State Register
LHD	Property located in a State Register-listed historic district

APPENDIX B

NATIONAL REGISTER-ELIGIBLE ARCHAEOLOGICAL SITES, STOUGHTON ALTERNATIVES

SITE NAME	PROJECT ELEMENT/RAIL SEGMENT	NRHP** CRITERIA	MHC CONCURRENCE, DATE
King Philip Street	Stoughton Line	NRE; D	4/3/2013
Chickering Road	Stoughton Line	NRE; D	4/3/2013
Site			
East Britannia	Stoughton Line	NRE; D	4/3/2013
Street Site			
Skunk Trapper	Stoughton Line	NRE; D	4/3/2013
Site			
Saws Wood Site	Stoughton Line	NRE; D	4/3/2013
Quartz Vein Site	Fall River Secondary	NRE; D	4/3/2013
Circling Hawk Site	Fall River Secondary	NRE; D	4/3/2013
Cold Toad Site	Fall River Secondary	NRE; D	4/3/2013
Overlook Site	Fall River Secondary	NRE; D	4/3/2013
North			
Overlook Site	Fall River Secondary	NRE; D	4/3/2013
South			
Braley Cemetery*	Fall River Secondary	N/A	4/3/2013
(MHC #FRE.823)			
Elisha Harvey	Stoughton Line	Undetermined,	Pending
Gravesite/Harvey		within an existing	(Avoidance)
Cemetery*		NRHP District	

* Not recommended eligible, but measures are required to protect marked/unmarked graves from project disturbance

**NRE National Register eligible

APPENDIX C

KNOWN LOCATIONS WHERE INTENSIVE (LOCATIONAL) SURVEY MAY BE REQUIRED

PROJECT LOCATION	RAIL SEGMENT	SENSITIVITY ASSESSMENT	SURVEY RECOMMENDATION
Route 138 Grade Separation	Stoughton Line	Conditional Low/No Sensitivity	Intensive Survey may be required; pending soil boring review for catenary structures
Canton to New Bedford-Fall River active and inactive ROWs*	Stoughton Line, Fall River Secondary, New Bedford Main Line	Conditional Low/No Sensitivity	Intensive Survey may be required; pending soil boring review for catenary structures
Stoughton Station and realigned tracks	Stoughton Line	Moderate sensitivity for pre-contact , nineteenth/twentieth-century resources	Sensitivity may be refined with additional soil boring data; Intensive Survey required if sensitive areas cannot be avoided

* Excludes sensitive ROW areas subjected to 2012 Intensive Survey: Stoughton Line, Southern Triangle (Fall River Secondary and New Bedford Main Line)

In addition to the locations listed above, it is expected that unknown locations including access roads, staging or temporary construction areas, and catenary locations will be identified as the Project proceeds.

APPENDIX D
EXPECTED IMPACTS TO HISTORIC PROPERTIES

PROPERTY ID	PROPERTY NAME/ LOCATION	ADDRESS	Physical (Direct)	Noise (Indirect)	Visual (Indirect)	Adverse Effect (P, N, V)
Ca.C	Washington Street	Washington St		X	X	V
Ca.H	Washington Street/Canton Center	Washington Street/Canton Center		X	X	V
Ca.001	Canton Junction Railroad Station	666 Sherman St	X		X	P,V
Ca.002	Revere Copper Company Railroad Embankment	Revere St			X	
Ca.006	Canton Public Library	786 Washington St			X	V
Ca.007	Forge Pond Railroad Bridge	Between Washington and Bolivar Sts	X			P
Ca.024	Canton Water Works	44 Pine St		X	X	V
St.B	Downtown Stoughton Area	Pearl, Perry, School, Washington, Pleasant, and Wyman Sts		X	X	N,V
St.022	Pearl Street Cemetery	Pearl St		X	X	V
St.023, St.B	Stoughton Town Hall	10 Pearl St		X	X	V
St.024	Mystic Rubber Company	2 Canton St			X	
St.025	Stoughton Old Colony Railroad Station	45-47 Wyman St			X	V
St.026	Lucius Clapp Memorial Library	6 Park St		X		

PROPERTY ID	PROPERTY NAME/ LOCATION	ADDRESS	Physical (Direct)	Noise (Indirect)	Visual (Indirect)	Adverse Effect (P, N, V)
St.046	Meade Rubber Company	25 Brock St	X			P
Ea.008, Ea.A, Ea.B (contributing)	Dighton & Somerset Line	Parallel to Mechanic Street from Elm Street to Main Street	X		X	P,V
Ea.B	North Easton Historic District	Elm, Lincoln, and Main Sts		X	X	N,V
Ea.C	Holmes-Linden Street Area	Holmes and Linden Sts		X	X	N,V
Ea.D	H.H. Richardson Historic District	Elm and Main Sts		X	X	N,V
Ea.E	Center Street Area	Center St		X	X	N,V
Ea.F	Easton Center Area	Center, Depot, and Short Sts		X	X	N,V
Ea.G	Hayward - Pool Area	Foundry St		X	X	N,V
Ea.003	Old Colony Railroad Station	Off Oliver St on Railroad Right of Way			X	V
Ra.001	Residence and Barn	521 Prospect Hill				
Ra.B	Carver Street Area	Carver St, Broadway (Route 138)		X	X	N,V
Ra.011	Dog Kennel and Track Property	385 Thrasher St		X	X	V
Ta.B	Taunton Center Area	Dean, Park, and Summer Sts		X	X	N,V
Ta.C	Taunton Multiple Resource Area	Multiple Throughout city of Taunton				

PROPERTY ID	PROPERTY NAME/ LOCATION	ADDRESS	Physical (Direct)	Noise (Indirect)	Visual (Indirect)	Adverse Effect (P, N, V)
Ta.D	High Street Area	High, Weir, and Somerset Sts		X	X	N,V
Ta.L	Hart Street Area	Hart St		X	X	N,V
Ta.18, Ta.C	Dean-Hartshorn House	68 Dean St		X	X	N,V
Ta.019, Ta.B, Ta.C	Old Colony Railroad Station	40 Dean St			X	
Ta.020, Ta.B, Ta.C	William Woodward House	117 Arlington St		X	X	N,V
Ta.021, Ta.B, Ta.C	Charles R. Atwood House	30 Dean St		X	X	N,V
Ta.022, Ta.B, Ta.C	Theodore Dean House	26 Dean St		X	X	N,V
Ta.029, Ta.B, Ta.C	Neck of Land Cemetery	Summer St		X	X	N,V
Ta.89	Cohannet Mills #3	120 Ingell St			X	
Be.C	Myricks Street Area	Myricks, Grove, and Mill Sts		X	X	N,V
Be.006	Residence	1 Macomber St		X	X	N,V
La.C	Assonet Cedar Swamp Area	Pierce Ave; County and Howland Rds; Freetown, Mill, and Malbone Sts		X	X	N,V
La.024	Peirce and Haskins Cemetery	Off Adams Lane		X	X	N,V
Ft.C	Slab Bridge Road Area	Slab Bridge, Forge, Richmond, and Howland Rds		X	X	N,V

PROPERTY ID	PROPERTY NAME/ LOCATION	ADDRESS	Physical (Direct)	Noise (Indirect)	Visual (Indirect)	Adverse Effect (P, N, V)
Ft.D	Assonet Historic District	Mill, Water, Main, Pleasant, Elm, Forge Sts		X	X	N,V
Ft.009	Richmond Road / Maple Tree Crossing Bridge	Richmond Rd			X	V
NB.C	Acushnet Heights Historic District	State, Pleasant, Linden, Austin, Hazard, and Country Sts		X	X	N,V
NB.D	Wamsutta Mills Historic District	Acushnet Ave; Logan, North Point, and Wamsutta Sts		X	X	N,V
FR.N, FR.C	American Printing Company- Metacomet Mill	Anawan St			X	V
FR.005, FR.C	William Collins House	3775 North Main St		X	X	V
FR.006, FR.C	North Christian Congregational Church	3538 North Main St		X	X	V
FR.010, FR.C	Borden- Winslow House	3063 North Main St			X	N,V
FR.012, FR.C	Canedy, Squire William B. House	2634 North Main St			X	V
FR.017	Residence	311 Crescent St		X	X	V
FR.026, FR.C	Brightman, Hathaway House	205 Crescent St		X	X	V

PROPERTY ID	PROPERTY NAME/ LOCATION	ADDRESS	Physical (Direct)	Noise (Indirect)	Visual (Indirect)	Adverse Effect (P, N, V)
FR.050	St. Michael's Roman Catholic Church	207 Essex St		X	X	N,V
FR.066, FR.C	St. Joseph's Roman Catholic Church	1355 North Main St		X		
FR.067	Cotton Warehouse	7 Oregon St			X	V
FR.070, FR.M	Al Mac's Diner	135 President Ave		X	X	V
FR.081	Residence	524 Durfee St		X	X	V
FR.082	Lafayette- Durfee House	94 Cherry St		X	X	V
FR.084	Central Street Bridge over Quequechan River	Central St			X	V
FR.089	Borden and Remington Company	85-115 Anawan St			X	
FR.003	Jael Hathaway House	4042 North Main St		X		
FR.052	St Matthew's Convent	189 Wellington Street		X	X	N,V
FR.053	St Matthew's School	231 Wellington Street		X	X	N,V
FR.110	St. John's Cemetery	Brightman and St. Mary Streets		X		
NB.G	National Spun Silk Co. – Onoko Mills	Brook St			X	
NB.011	Manomet Mill #4 - Manomet Tire Cord Fabric Mill	117 King St			X	

PROPERTY ID	PROPERTY NAME/ LOCATION	ADDRESS	Physical (Direct)	Noise (Indirect)	Visual (Indirect)	Adverse Effect (P, N, V)
NB.012	Belleville Warehouse Company Cotton Storage Building	51 King St			X	
NB.026	Pierce Brothers Textile Mill Complex	1125-1129 County St			X	
NB.029	Christ Presbyterian Church	1097 County St			X	V
NB.053	Purchase Street Fire Station	2071 Purchase St			X	V
NB.063	Union Street Railway Carbarn	1959 Purchase St			X	
NB.065	Dawson Building	1843-1855 Purchase St			X	V
NB.081	New Bedford Cotton Storage Warehouse Co., North Stores	19 Jean St			X	
FR.C	Fall River Multiple Resource Area	Multiple				
FR.D	North Main Street Area	North Main St	X	X	X	P,N,V
FR.E, FR.C	Border City Mills	Weaver and West Sts			X	
FR.F, FR.C	Sagamore Mill Nos. 1 and 3	Ace St			X	
FR.G, FR.C	Sagamore Mill No. 2	North Main St			X	
FR.H, FR.C	Foster Spinning Company	Cove St			X	
FR.J, FR.C	Narragansett Mills	North Main St			X	
FR.K, FR.C	North Burial Ground	North Main St		X	X	N,V

PROPERTY ID	PROPERTY NAME/ LOCATION	ADDRESS	Physical (Direct)	Noise (Indirect)	Visual (Indirect)	Adverse Effect (P, N, V)
FR.L	Durfee Street Area	North Main and Durfee Sts		X	X	N,V
FR.M	Diners of Massachusetts	multiple		X	X	V